CURRENT PSYCHOLOGIES

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A CRITICAL SYNTHESIS

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A CRITICAL SYNTHESIS

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Fundamentals of Psychologic Guidance
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Testing Intelligence and Achievement

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PUBLISHERS' NOTE

While the psychological market is flooded with textbooks of various kinds, the majority of them on general psychology, but many devoted to social psychology, educational psychology, abnormal psychology, and child psychology, there has been a dearth of works on contemporary psychological schools. Yet, unless we understand the fundamental principles of a particular psychological system, we cannot properly evaluate the data of elementary psychology envisaged by it. To seek our information in single expositions by representatives of these differing systems offers no satisfactory solution; for frequently each writer speaks a language of his own, and disregards the standpoints of his opponents.

Dr. Levine has undertaken to fill this want; and it is our belief that he has performed his task adequately, both as to the inclusion of relevant material and the balanced apportionment of topics. Hence we are pleased to add his *Current Psychologies* to our list of psychological books, which have won a fair mead of recognition in educational Circles.

The chief merit of his *Current Psychologies,* which, we are glad to say, inaugurates our textbook series, lies in the author's ability to systematize, to detect similarities, and to iron out wrinkles which otherwise might have remained as kinks not only in the eyes of students but also to the perspective of many instructors. The author has sought in all the maze of theory which even the experimental schools offer — a common denominator, and he appears to have met with a considerable degree of success.

The publishers will be glad to receive suggestions from those psychologists using the book as a text in their classes, with a view to a thorough revision in the event a second edition is called for in the near future. Such coöperation will be appreciated and duly acknowledged.

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PREFACE

THIS book arose out of a struggle on the part of the author to resolve a distressing miscellany of psychological facts and theories into a workable synthesis. The task was made difficult by the embarrasing multiplication of "schools" of psychology — schools which seemingly drew new blueprints of human nature. The new terminology which each "school" introduced added to the perplexity by conveying the impression that each new term represented a newly discovered psychological entity. It is only when these "discoveries" were analyzed that they were revealed as well-known psychological theories which had grown trite through familiarity.

Furthermore, the attempt to work out a synthesis was thwarted by the emergence of "schools within schools." They were headed by dissentients who, singling out one phase of the parent schools, proceeded to articulate it into a complete theoretical system. Each sub-school had to be studied, evaluated, and pigeon-holed. When these were compared, it became clear that the similarities were greater than the differences; that many sub-schools could well be attenuated to a footnote to the parent school.

The result of such effort is classification of schools of psychology into

(1) The Neurological (Classical or Scientific) School.
(2) The Gestalt School with its topological orientation.
(3) The Purposivist School.
(4) The Freudian School comprising (*a*) Freud, (*b*) Jung, (*c*) Adler, (*d*) Rank.

The treatment accorded each school involves (1) space commensurate with its importance, (2) inclusion of the essentials. The book is rounded out with a chapter dealing with the congruities underlying all psychologies and a statement of the similiarities and differences obtaining between these schools which are undergoing rapid evolutionary changes.

A. J. L.

INTRODUCTION

BASES FOR THE CLASSIFICATION OF CURRENT SCHOOLS OF PSYCHOLOGY

THE efficacy of a classificatory system depends upon the success with which essence is distinguished from appearance, content from form. The number of "schools" of psychology may be multiplied indefinitely if the terminology employed is made the point of departure. In fact, judging by terminological differences only, one can make out a case for the recognition of scores of psychologies whose chief claim to attention is the invention of a new technical vocabulary. Criteria of content also suffer from numerous disqualifications.

Unlike the pure sciences, psychology cannot lay claim to the possession of an uncontroverted body of basic principles which form at once the blocks and cement of new superstructures. Psychological lore shares with icebergs the characteristic of having most of its bulk submerged; only the small fraction is visible to the objective eye of science. The rest is the product of theorizing reënforced by introspection. This circumstance complicates the process of classification.

However, since the alternatives to systematic classification are distressing miscellaneousness or bewildering multiplicity, recourse must be had to categories that correspond to conspicuous qualities or sharply defined trends. Of these the following are most important:

1. *Degree of Scientific Orientation.* The use of a modified scientific approach — modified to fit the exigencies of

inconstant forces — furnishes a basis for classification in the form of a dichotomy. "Scientific psychology" is the label that may fittingly describe some of Wertheimer's and Koffka's studies in *Perception,* the *Project* method of Dewey, the *Testing* movement inaugurated by Thorndike, investigation of *Animal Intelligence* by Yerkes and Meumann's cardinal contribution to the study of *Memory.* All psychologies that are not firmly based on experimentation and scientifically rigorous investigation would be relegated to the category of "non-scientific." This criterion would cut across most of the "schools" of current psychology without furnishing definitive lines of demarcation. For the Freudians could make good their claim to "scientific" by the simple expedient of pushing back the boundaries of this concept to include clinical observation of typical "cases." Though many psychologists, especially those who occupy themselves with tests, claim the distinction of being scientific, it is not broad enough to serve as a grouping principle.

2. *The Use of Dynamic Concepts.* This is equally unsatisfactory as a basis for classification. For one thing, extremely few psychologists espouse an out-and-out mechanistic interpretation of the mind. Therefore, the use of this scale would place the radical wing of the Behaviorists in one tray and all the rest of the "schools" in another. This hardly suffices as an individuating device. For another, there is strong probability that the concept "dynamism" is no more than a metaphorical creation that bears little semblance to its scientific counterpart. It may be successfully argued that the dynamism operating (1) in the stimulus that conditions the reflex, (2) in the sensations that are wrought out into percepts, and (3) in experiences which the mind transmutes into pragmatic behavior, are of a piece with the dynamics of balance and counterpoise that inform Gestaltist psychology. Nor is it alien to the Freudian thesis of inter-

play between the Conscious and Unconscious, for all psychologies with the exception of Behaviorism postulate a dynamic link between the conscious and the sub-conscious.

3. *The Rôle Assigned to Instincts.* Quantitatively, instincts have undergone a steady and disastrous shrinkage as they passed through the psychological wringers of James, G. Stanley Hall and Watson. But whatever their number, they have displayed a vitality undimmed by even terminological attenuation. For, in one form or another, and under various names, instincts are important elements in all schools of psychology. The conditioned reflex, as in food getting, is closely associated with instinctual behavior, and the libido of both Freud and Jung is but the outpouring of instinctual energies. To classify schools on the basis of the importance assigned instincts in the adjustive processes is to confuse the effort at classification, for quantitative or qualitative differences are better suited to the production of a scale or a hierarchy rather than a complex of independent systems.

4. *The Resort to Unique Characteristics.* It is a poor psychological system that cannot boast of some conspicuous characteristics. One prides itself on its uncompromising objectivity, another on its simplicity of presentation, a third exults over its devastating outspokenness, and a fourth glorifies the human will or reason. Looked at from this point of view, every psychology that has assumed the dimensions of a system would be found deserving of a distinct place in the perspective of a history of psychology. Since the objective of classification is historical recording as well as pedagogic lucidity, it would ill serve the interests of clarity to endlessly multiply psychologies. Granted that one cannot ignore characteristics, their saliency depends on their importance as organizing factors and on their uniqueness; the value of distinguishing features flows less from their con-

spicuousness than from their relevancy to the entire purpose that animates a system. The presence of a cast in an eye may well serve an individual as an identifying mark, but its nature is too trivial and accidental to serve to distinguish personality patterns.

5. *The Degree of Passivity or Self-activity that Underlies the Adjustive Processes.* Since the fundamental purpose of all psychologies is the acquisition of insights into the processes of adjustment, it is but reasonable to employ this feature as a selective principle. Its influence pervades almost every major phase of psychological speculation. It deals with a vital issue; it transcends in significance any other characteristic associated with all psychologies, and it reduces the number of schools of psychology to a pedagogically manageable minimum.

Thus conceived, the various schools of psychology may be classified into two large groups:

1. Psychologies which stress the passivity of the mind in the process of being molded by environmental forces. It will be seen, however, that this qualification of passivity is a rhetorical exaggeration designed to stress the semi-automatic nature of many behavioral responses and the relatively more active collaboration of environmental forces. In this group may be placed the psychologies that reduce human behavior to an interacting activity between instinctual energies and the realities of communal living. They view the adjustive process as a product of successive habituations which the individual has accumulated over a long period of groping and faltering endeavors at adaptation. The resultant product is augmented by the addition of small increments of behavior each serving as a stepping stone to the next developmental stage. Therefore, long range planning and the formulation of distant objectives that take in more than a narrowly limited span of existence do not play an

important rôle in the life processes. To repeat, this conception does not imply a total lack of prevision. But it envisages the mind in the part of a quarterback, who, animated by a fierce desire to win the game, is primarily concerned with overcoming emerging hazards and in uncovering advantages in the immediate situation. In like manner, the individual is thought of as developing by a sort of investigative gradualness in the direction of a distant objective which is obscured by problems of absorbing immediacy.

2. At the opposite pole to this conception may be placed the thesis that the mind not only excels as a quarterback but combines with it the function of a coach. The mind proceeds along the pragmatic lines of calculative tentativeness while it keeps in sight a well-defined goal towards which it is continually striving. When faced with obstructions it mobilizes all its energies towards overcoming them so that for the absorbing moment the goal is forgotten. But once surmounted, the impediments cease to be objects of interest; the elation that success engenders reënforces the goal-seeking urge, thus converting the life process into an effort to hew narrowly to a plan of life oriented towards a distant future. This master goal may emerge slowly as a consummation of intermediate goals, but consciously or unconsciously, there is a comprehensive plan. It may undergo many modifications as a result of the unexpectedly obtruding exigencies of reality. It may even become sidetracked by seductive diversions, yet it lingers on and colors all but sporadic behavior with a purposiveness that gives cohesion and continuity to existence. In addition, it provides motives for human behavior.

Whether purposiveness in human behavior is the essence of psychology or merely a significant element depends upon one's attitude towards its findings. If psychology is regarded exclusively as a body of facts and theories associated by causal sequences, then purposiveness becomes suspect of a metaphysical bias. Life is simply lived within a circle of interactions in accordance with natural laws. Any manifestation of motivation is but the interplay of cause and effect as it works out in an unbroken sequence of cumulative change. To this view is opposed the conception of psychology as the explanation of the phenomena of human adaptability to social situations; situations that are so complicated and changeable that they cannot be fitted into purely mechanical causation. It looks upon the chain of human behavior as planned not only on the level of instinctive striving but on that of conscious adaptation of elaborate means to ends so distant that their consummation involves the suppression of importuning biological urges. If one espouses the former view then psychologies may be divided into the Scientific and the Speculative schools. Here "speculative" would carry an invidious meaning. To the "scientific" might be assigned the Classical psychology (the heir of the Structuralists), the Behaviorists, the Functionalists and even the Gestaltists. In the interest of pedagogic simplicity they might be lumped together into the Scientific School. The Speculative School would bring together the Purposivist or Hormic School and the Freudian Schools. Another classification is indicated for those advocating the purposive or motivationist view of the mind. The cleavage might be made along motivationist and non-motivationist lines. To the non-motivationist would be assigned the mechanists among the adherents of the various schools. In this group would be placed the Behaviorists, Structuralists, and Functionalists. The Gestaltists would be placed in a division intermediate between the two. The reasons for such allocation are these: Firstly, Gestaltists conceive behavior as activated by the same laws which are basic to physics. Insofar as these laws are "natural" laws operating independently of the human will, Gestalt psychology displays an intimate kinship with Behaviorism. Secondly, the significance Gestaltists attach to insightful behavior implies the presence of a dynamic factor in personality development. The inclusion of this factor serves to point Gestaltism towards a purposive orientation of the ego and thus serves to link Gestaltism with Purposivism. The Hormic School and Freudians would rub elbows as members of the Motivationist school, with the Purposivists and Rankians arrayed as the Right and Left respectively of the Freudian Center.

This is essentially the form of classification followed here. However, the term "non-motivationist" has a purely negative implication. Therefore the more descriptive term "neurological" was substituted, with "classical" as a supplementary designation. It is at best decidedly schematic in its nature. It will be seen that no classification that rests on an antithetic basis is thoroughly valid; for there are too many congruent elements to warrant a sharply demarcated division.

Omitted Schools: This book deals with "Current Psychologies." The emphasis, then, is advisedly on the schools of psychology which play an active rôle in furthering the understanding of human behavior. This aim precludes the discussion of "schools" that have outgrown their usefulness. While they still possess an academic significance, or even a "germinal" vitality, they no longer exert an influence upon psychologic thinking. Even the frequent attempts at their rehabilitation fail to disturb the alignments of the current schools. Hence the exclusion of the Structural and Faculty Psychologies.

Endocrinology has been denied a place for another reason. It is difficult to include it under psychology. For one thing, it does not present a complete system explanatory of the salient aspects of human behavior. It does not take cognizance of intelligence in its creative and instrumentalist activities. Its explanation of temperament and emotions tends to emphasize the physical and chemical basis of personality. This is not a seriously controverted issue among psychologists. It is accepted as a datum of ego development. The endocrinologists are merely implementing this belief with supportive and corroborative evidence. In the capacity of serious students of human behavior, they are less innovators with a unique and distinctive point of view than researchers along established lines.

Furthermore, the findings of endocrinologists are still in the stage of tentative and fragmentary experimentation blemished by wishful thinking. It is to their credit that their studies are distinguished by a high seriousness. But seriousness is often impaired by a crusading eagerness which may betray its possessor either into uncritical acceptance of favorable results or into an exaggerated valuation of his own potentialities. Time alone can annul these shortcomings; and in the search for knowledge time marches on leaden feet of fact-sifting. Many would equip it with imaginative wings of snapshot judgments. In the field of endocrinology, time must be permitted to resume its unhurried advance.

It may not be amiss to emphasize the common denominator in all schools of psychology. This is natural since they all concern themselves with behavior in its outer and inner manifestations. Therefore none of the "schools" are delimited by sharp boundaries. Nor have they remained hostile and impervious to each other. There is evidence of a desire for mutual understanding whenever partisanship or sectarianism has been dulled by time or has faltered in the face of unchallengeable facts. It is not surprising to discover in many schools an admixture of the terminology and tenets of their rivals.

CHAPTER I

THE NEUROLOGICAL SCHOOL

THE ECLECTIC NATURE OF THE NEUROLOGICAL SCHOOL

The neurological school is intrinsically a synthesis of psychological principles garnered from various schools. It employs structural psychology as an integrating element. Architecturally, it may be envisaged as a structure composed of a central building fabricated out of the brick and mortar of isolated states of consciousness and innate capacities flanked by less substantially built wings in a state of constant remodeling. It is as though the architect was averse to making definitive plans owing to the rapidity with which styles are changing. Thus we find in neurological psychology a strange admixture of Gestalt principles, Purposivist theories, and Freudian conceptions, complicated by a continually shifting emphasis as to their significance. Indeed, its continually broad catholicity makes for an unarticulated heterogeneity which, at times, approaches a highly diversified miscellany. Unlike the other schools of psychology, its boundaries are indefinite and its content exhibits a distressing degree of fluidity.

However, one can discern a number of stabilizing components that serve to individuate the school. It is mechanistic in its orientation. It assumes that simple states of consciousness combine and are elaborated into higher mental states. These form the content of consciousness. This is the "known" consciousness. There is also a "knowing" consciousness which supplies the energy and motivation for the "known" consciousness. The investigation of the states of consciousness is widened to include the study of human behavior as exemplified in habit formation, in learning, and in the development of personality traits. Habit formation is envisaged as a linkage of instinctive trends with stimuli coming from the environment. Habits are learned responses engrafted upon unlearned (instinctive) reactions. By a process of trial-and-error, movements which are neither essential nor relevant to the habit are gradually eliminated and the necessary movements are welded together by practice under the spur of the feeling of pleasantness and unpleasantness, satisfiers and annoyers. This process is known as association or connectionism.

The process of habit formation is also at the heart of personality development. Such developmental personality habits constitute the traits which society demands of those who would achieve social efficiency. The concept "personality" differs in connotation from that popularized by the other schools of psychology. Its emphasis is more on the moral components of conduct than on the social ingredients of behavior. It stresses the formation of ideals that enable the individual to so comport himself as to rise above the seductions of his lower self regardless of the consequences. Highmindedness, though implicit in the current concept "personality," is subordinated to behavior which emphasizes the ability to streamline the individual's contacts with his fellowmen with a view to ingratiation. The man of character obeys the dictates of an idealized conscience and lets his acts fall where they may. The man of pleasing personality strives to endear himself to his fellowmen by a scrupulous regard for their sensibilities and for the accepted conventions.

Character, like habit, is a matter of "formation." That is, human nature on the instinctive side is thought to be susceptible of manipulation. Therefore, education occupies a place of importance in neurological psychology. In order to enhance the educative process, the neurological school has addressed itself whole-heartedly to the problem of educational methodology particularly to the furtherance of the testing movement. Indeed, its statistical refinements of the testing technique has bolstered its claims to "scientific" psychology, a claim which it also bases on a preoccupation with the objective study of human behavior. This, however, is the distinctive contribution of the Behaviorists, who despite their insistence on the status of a distinct school, are bracketed with the neurological school.

THE NEUROLOGICAL SCHOOLS OF PSYCHOLOGY

Human behavior manifests itself in overt action through the interaction of instincts, emotions, intelligence and musculature. The explanation of their functioning has been sought in physiology and sociology. The physiological approach leads to the consideration of the neurological substrates of conduct; the sociological to the study of motivation. Both are concerned with the "how" and the "why"; the former arrives at the "how" of behavior by stressing neurological mechanisms; the latter, by emphasizing psychological motivation. On the neurological view, habit, for example, is built into the nervous system through the impingement of environmental stimuli upon the nervous system mediated by the sensorium: it is "built in" by chance and selected stimuli. It works from without, in. The motivationists accept the neurological mechanisms as data and account for habits as modes of reaction arising from the inner conflict between innate impulses and restrictive environmental forces eventuating, in normal beings, in acceptable adjustments to social exigencies. In the resolution of this conflict both stimuli and neurological mechanisms are active, but the driving force is transferred from the stimulus to the will-to-self-realization, variously designated as *élan vital,* will-to-live, and libido. Habit works from within, in.

Therefore, the neurological psychologists consider the nervous system as salient. This system consists of a spinal cord and brain. The cord is the seat of reflexes, such as winking. It sends and integrates impulses from the trunk and limbs to the brain, and transmits motor impulses from the brain to the limbs and trunk. It continues into the medulla oblongata, which controls respiration and heart; it controls coughing, swallowing, vomiting, salivation, sneezing and sucking. Now comes the cerebellum whose chief function is that of maintaining bodily equilibrium. The cerebellum leads to the pons, which initiates movements of the jaw, contraction of facial expression, movements of the eyelids and the secretion of tears. These are reënforced by the mid-brain, the thalamus and the cerebrum. The former is associated with the senses of sight and sound. It also contains nuclei which serve as relay stations between the senses and the cerebrum. The thalamus is sometimes spoken of as the mid-brain. It is thought to be the center of feelings and emotions. The cerebrum (end brain) constitutes seventy per cent of the nervous system. From it issue nearly all sensory impressions and motor control. It is analogous to the central exchange of a telephone system. It connects every part of the body through a chain of cells called neurones. The outer layer (the cortex) is the most sensitive portion and enables man to analyze his environment.

This system is paralleled by another, the autonomic system. It controls the viscera, the seat of the organic functions of the body. It has a cranial section. It links up the central nervous system with the lens and iris muscles of the eye, the salivary glands, the digestive system, the bronchial tubes and the heart. The sympathetic section prepares the body for increased activity. When the organism is faced with a dangerous situation, the sympathetic system withdraws blood from the interior of the body, pours sugar into the blood stream, activates the adrenal glands to liberate the adrenin hormone to restore fatigued muscles, enlarges the pupils to magnify vision, and prepares the sweat glands to take care of augmented bodily heat. The sacral section controls excretory functions.

The nervous system, like all bodily systems, does not come into being as a piece of disassembled machinery. It functions at birth, albeit creakingly and strainedly. Nor does it come unprovided with motor forces. The energy is supplied by instincts, impulses, reflexes, feelings, and emotions. These are unlearned responses and urges or drives. The infant can suckle the breast, he can work his eyes, he can grasp objects and he can cry with a lustiness that leaves no doubt as to his presence. He manifests in unequivocal terms the instinct of hunger. Other instinctive trends are merely germinal, reaching fruition at a later stage. There is no unanimity among psychologists as to the number and discreteness of such instincts and emotions. They run the full gamut of classification from a score of unitary trends to three nuclear, non-derivative urges. The central tendency leans towards the consideration of trends whose complexion partakes of the qualities of instincts imbedded in a matrix of emotion; the latter is considered as a function of the former. Thus the instinct of gregariousness is colored by the emotion of love.

The indwelling instincts and emotions are insufficient to engender social-mindedness. For one thing, they are not trustworthy; an instinct tends to run to excess. For another, they are not all good; some must be repressed, others modified or sublimated. The task of guiding instincts towards socialization devolves upon experience and education. Experience means auto-education and involves familiarity with the beneficent and malevolent environmental forces impressing themselves upon the human organism through the uncontrolled manifestations of the discipline of consequences. Education operates through a contrived environment manipulated by parent or teacher whose sanctions are rendered palatable by means of rewards and the judicious bestowal of approbation.

Both manipulated and unmanipulated environment react, in accordance with an objective neurological formula, the S-R formula, in which S stands for Stimulus and R for Response. Take any act of learning, say, to read C-A-T; the symbol "cat" is the stimulus. The spoken word "cat" is the response. In its inceptive stage, the retinal image is the sensation, the recognition of its "togetherness" is the percept. Neurologically, the sensation has energized a nerve which conveys the impression to the central nervous system where an act of interpretation produces the percept "cat." Another nerve activates the laryngeal apparatus and utterance results. The neural path takes this route: sense organ (eye) → afferent (ingoing) nerve → central nervous system → efferent (outgoing) nerve → muscle. Facile learning requires that throughout this operation the learner does not remain impassive — a state in which he views myriads of sensations which throng the environment. His participation in the learning process is actuated by the loosing of instinctive energy, the instinct of self-assertion or that of curiosity back of the long-range wish to dominate his environment. But the S-R mechanism also proves workable when self-activity is at an ebb, provided repetition has deepened the channel between afferent and efferent pathways. "Repetitio mater studiorum est" is the slogan of the neurological psychologist. If the learner is receptive, if "Barkis is willin'," learning is more readily consummated; if he is indifferent, then resort should be had to mechanical interaction.

Upon the S-R formula as a foundational technique, laws of learning have been erected by Thorndike and his disciples. They are known as (1) the law of readiness or interest; (2) the law of exercise or practice; (3) the law of effect, or satisfaction and annoyance. The law of readiness enjoins that the learner get "set" for the learning process to the end that no obstacle in the way of physical or mental distractions is placed between stimulus and response. Like a sprinter, he must set himself for the liberating pistol shot. The law of practice has regard to the strengthening effect of repetition; the nerve connection deepens and therefore becomes more lasting. But practicing must not be maintained without satisfaction. It must be accompanied by a feeling of satisfyingness. This is the burden of the law of effect. Make learning a pleasant pastime!

These laws are cited in explanation of the educative process. The infant grows into adolescence and the adolescent into adulthood by virtue of the exercise of readiness, practice and effect. Life may thus be envisaged as a series of sprints lived at the behest of a teacher-parent starter who signals the practitioner when to "get ready," and when to "get set," and when to "go." The only difference being that on the cinder path only one can win the prize, while in life's stadium the rewards are more liberal; pleasantness attends all participants.

However, there may still remain a goodly number who possess a cortical layer of poor quality, or repeatedly get left at the post, thus excluding them from the benefits of rewards. Their fate is not considered hopeless. Poor retentiveness may be offset by more intensive practice. The stimulus is dressed up and rendered more attractive by infusing an element of novelty. The associative bond between stimulus and response, in habit formation, in conduct, may be forged if the repetitive process is persisted in.

The dearth of rewards is not considered a serious obstacle. Unpleasantness or annoyance are deemed fairly efficacious. When the controlled stimulus does not produce the correct response, when delinquent conduct persists, punishments may be resorted to. Whether rewards or punishments or an alternation of both are made use of, the underlying fundamental principle remains unaltered; the adjustive instrument is the nervous system and education is the judicious application of the S-R formula and the three laws of learning.

VARIANTS OF NEUROLOGICAL PSYCHOLOGY

Behaviorism and Functionalism possess sufficient commonality with Neurological Psychology to warrant their close association. However, they exhibit divergences which set them off sharply from the parent school. These hardly merit the opprobrious dialectical characterization "deviations," even though the extremists in the opposing camps vociferously proclaim their independence on the basis of new conceptions of mental life. Differences there are, but in their essence they derive more from a shifting of emphasis than from the formulation of new principles. Hence, their classification as "variants."

Early in the history of psychology its boundaries were extended into the realm of science. Allured by its uniformities and stable laws, psychologists set out to build psychology on a scientific foundation. The movement was launched with attacks on introspectionism. They did not desist with the introduction of the experimental method as elaborated by Wundt and his contemporaries. For, Wundtian experimentation with its dependence on an artificial stimulus and the self-searchings of the "subject," merely shifted introspection from the observer to the observed. Success in the form of the performance experiment finally crowned their efforts. The performance experiment marked an advance in the direction of scientific orientation in that the tester concerned himself less with the states of consciousness produced by the tests and more with the objective data which these tests yielded. These data served to throw light on new areas of consciousness; not pure states like sensation but dispositions, talents and skills. In so far as they represent mental states, they are conscious; to the extent to which they were innate, they did not entirely fall within this category. That phase which was not conscious took on an aspect of objectivity and, therefore, became amenable to scientific investigation.

Those who espoused the objective approach came to stress "action" as against mental states. The former was favored because behavior is directly observable. This attitude was reënforced by the evident failure of introspectionism to plumb the mental depths of children and animals. Since their inner states could not be introspected, it became necessary to observe their behavior. To this task, Thorndike, Yerkes and Margaret F. Washburn addressed themselves with signal success. These springs of behavior, experimental and child and animal psychology, fed the currents that eventually merged into the Behaviorist stream.

The point at which James broke with the exponents of a straightlaced mechanism operating as a chain of causal determinism, marks the parting of the ways for the extreme Behaviorists. For a break in any one link caused by the pressure of will destroys the absolute determination of mental phenomena. The break with Mechanist psychology also resulted in the formulation of Functional psychology. Its relationship to James is not one of direct descent, but rather that of inspiration derived from his individualistic conception of mental life. The conception became germinal in Dewey's theories, which stressed the view of man as sustaining a reciprocal relation to given situations. The reflex arc which, in the atomistic psychology, converted the individual into a responding machine within a stimulus-response circle, was interpreted by Dewey as a component of a totalitarian reaction activated by a purposive attitude. The stimulus may be isolated but it cannot be separated out in reality, for the stimulus only becomes actualized through the motor response. Stimulus and response are the means by which the individual attains a purposed end.

J. R. Angell came to the defense of the principles of Functionalism with his contribution of three principles: (1) Functionalism is the "psychology of mental operations in contrast to the psychology of mental elements." It is the "what" of psychology pointed with the "why" of its operation. (2) Functionalism envisages consciousness as intermediating between the environment and the needs of the organism. Consciousness is an adaptive mechanism. (3) Functionalism includes not only consciousness but the whole psychophysical organism with its unconscious instinctive mechanisms.

Both Behaviorism and Functionalism sustain a definite relationship to each other. Although Watson disavows such kinship, Dewey's reflex-arc analysis emphasizes the impact of previous experience upon future reactions and the integrative power of neural mechanisms. There is also another marked similarity between Dewey and Watson. The latter's fundamental thesis that mental life should be conceived as capacity and adaptation stems from Dewey's preoccupation with the adaptive tendencies of the psycho-physical organism. Only, Watson slurred the psychic and exalted the physical.

BEHAVIORISM

The neurological school harbors many radical movements. In the forefront of these stands Behaviorism. It is not a clean-cut system because it is marred by trends towards a left wing and a right wing. The left and most popular wing is dominated by J. B. Watson and is known as Watsonian Behaviorism. For Watson, the human organism is a responding mechanism. Man's endowment is limited to bodily organs, a nervous system, a few undifferentiated instincts — mere "squirmings," Watson calls them — and a specific number of emotions. All of these react as a coördinate unit through the medium of some muscle. Of the bodily organs, the ductless glands or endocrines are accorded an important rôle.

Environment with its various aspects — the material, social, and cultural — is conceived as an aggregation of stimuli in continuous interaction with the endowment. The Behaviorist accepts the responsibility of effecting a workable integration of endowment and environment. He concerns himself with the task in the manner of an engineer charged with building a human product and he cheerfully undertakes to manufacture a product according to definite specifications.

The responsibility is solely his. He does count on the coöperation of the human intelligence or will. His method is known as conditioning; his chief tool is the conditioned reflex. It operates in a simple manner. If you scratch an infant's hand he withdraws it. This is a reflex. If the act of withdrawing the hand is accompanied by a loud noise and this association is repeated, the child will withdraw its hand upon hearing the noise even when the hand is not scratched. This is called conditioning; the original reaction is the unconditioned response. The child has, thus, become conditioned to noise. The noise may be varied in intensity or quality and the child may be conditioned separately to each variation. In like manner emotional responses may be conditioned. If you imprison the child's hands so that it cannot move, it exhibits symptoms of rage. This is an unconditioned response. Let the same person inflict this punishment several times and the child goes into a rage tantrum at the mere sight of the offending person.

The manner of conditioning of fear responses will serve to illustrate the complementary process of unconditioning. A loud sound or loss of support evokes the response of crying (fear). The simultaneous presentation of any furry object (rabbit, dog, cat) will provoke manifestations of fear. When the child begins to talk, a conditioned fear may be set up to words. The stimulus, fish, in a bowl may be associated for the child with the word "bite"; the sight of the fish-bowl will tend to produce the fear-response "bite." To eradicate this conditioned fear, the fish bowl is placed unobtrusively on the table at which the child is eating — or on a more distantly located object — increasing the distance experimentally to a point designed to produce a feeling of security. For days the distance is imperceptibly lessened until the fish-bowl appears in close proximity to the child without exciting it. The child has been unconditioned.

The overt behavior of the child during conditioning and unconditioning has its counterpart in neuro-physiological activity within the body. The nervous system, bodily organs (including the ductless glands), the muscles, and the sense organs, are all closely bound up together. The connecting mechanism consists of neurones: afferent, correlational and efferent. The first carry impulses from the sense organs to the central nervous system; the correlational neurones transfer impulses from one center to another to be carried out by the efferent neurones through muscle or gland. The complete circuit is expressed in the formula stimulus-response, and involves disturbance in the nervous system as well as in the bodily organs; a response evoked by a stimulus produces changes in the whole body.

The Behaviorist claims that he "needs nothing to explain behavior but the ordinary laws of physics and chemistry." Man comes into the world with a bundle of embryologic responses whose sources of energy reside in neuro-physiological mechanisms closely bound together by highly sensitive neurones. The responses are augmented indefinitely by conditioning; the law of permutation and combination offers the psychologist the means of building countless habits. There is no need to postulate consciousness or any vitalistic principle such as "purpose," "aspiration" or "soul." "Order in the universe," says Watson, "is merely a matter of conditioning." There is, then, no need for indoctrinating ideals and ethical principles. Choice of these is a matter of exercising the cortex and of building-in inhibition in the sympathetic segment of the autonomous system.

The rejection of consciousness does not preclude a ready explanation of the process of thinking. Thinking is talking. The child is accumulating words from the moment he begins to prattle. The behavior is vocal. Sometimes his talking disturbs his elders and reproof or punishment silences him. But he still continues to talk, only this time sub-vocally. Ever afterwards, thinking is done by the muscles within the throat. Thinking, then, is laryngeal organization.

In solving problems, the whole body is set to thinking. Each phase of a problem is reacted to successively in terms of manual organization and verbal organization, depending upon the muscular, verbal or emotional responses involved.

A building project calls for manual dexterity attained through the handling of tools. Proving a proposition in geometry calls into requisition the verbal organization. Deciding upon a course of action is facilitated by reinstating within the ductless glands and digestive tract the secretions and digestive disturbances that formerly accompanied allied emotional adjustments.

PERSONALITY DEVIATIONS: THEIR CAUSE AND CURE

For the Behaviorist, normality is a matter of right conditioning. It involves the building up of right habits by so arranging situations for each individual that socially effective reactions follow inevitably. These habits coalesce to form habit systems. Their sum constitutes the personality. Personality deviations are the result of wrong conditioning. They may bring in their train a host of conflicts but they spring from a Behavioristic unconscious, the counterpart of the Freudian unconscious.

Consciousness is not a datum of Behavioristic psychology. By consciousness is meant the tendency of the individual to talk things out with himself sub-vocally. This laryngeal cross-examination calls into requisition the mechanism of verbalization, the creation of a word-world to correspond to the manual and emotional organizations that constitute human behavior. The need for verbalization is felt when the childish habit of thinking aloud is placed under the ban of the adult's displeasure. Under this prohibition, the child improvises an audience, a sort of inner comrade, an imaginary doll to whom children love to talk to.

The habit of verbalization grows with the enrichment of the child's vocabulary. Not all children, however, possess the facility to acquire words and phrases. Silent parents retard the process of verbalization in their children. Such children swing into action only when confronted with objects in their proper settings. These form patterns of reaction, which harden with practice. When these patterns conform to accepted social practices, the behavior is normal. When they run counter to them, they produce derangements. They need not be attributed to repressed wishes or to the eruption of complexes. Since there is no consciousness, there cannot be an unconscious. The nearest approach to one is the unverbalized unconscious — a negative unconscious. It is the individual's unverbalized world.

However, the demolition of the conscious and unconscious still leaves intact the fearsome complexes whose ravages the psychoanalysts have so masterfully exposed. Here again, the Behaviorist falls back upon conditioning. The mother-fixation complex, for example, falls in this category. It stems from a distortion of the child's nest habits. From infancy the child becomes conditioned to its mother. An over-indulgent mother will rivet upon him the chains of dependency. She becomes the center of reference for the emotional, manual and verbal reactions. The nest habits have become congealed around the mother. Marriage does not disrupt them. It goes on the rocks and statisticians record another divorce.

Phobias are also explained in terms of conditioning. The first link in the chain is loud, sharp sounds or loss of support. By the process of radiation, the fear reactions are transferred to other stimuli. Soon a long chain of fears is forged and a host of phobias come to plague the individual. Each succeeding link represents a fear response which is remotely connected with the original ones. They constitute fear responses of the first, second and succeeding orders depending upon the ease with which "transferences" are obtained.

Since the Behaviorist recognizes no unconscious, he disavows psychoanalysis as a therapeutic technique. He offers instead the remedy of retraining or unconditioning. In the case of mother-fixation and phobias he advises resort to the reconstruction of the individual's repertory of habits to the end that new responses replace the old ones. This transformation cannot be effected by talking or by the interpretation of dreams. The faulty responses have never been verbalized in the brooding reflections over cumulative frustrations. Rather are they the reactions built in directly by an unfavorable environment. To effect an alteration in the individual's responses, the environment must be so contrived as to supply adequate stimuli. The process is a protracted one; so is that of psychoanalysis.

FUNCTIONALISM

Functionalism arose as a protest against the over-simplification which attempted to explain the process of an adjustment in terms of stimulus (or sensation) and response. In 1896, the reflex arc concept was advanced by Dewey as a more workable explanation. The physiological reflex was conceived as mediating between the felt need and the consummating response. Dewey insisted that the arc consists of (1) sensation, (2) the initiation of the muscular contraction, (3) the movement, and (4) the sensation that results from the movement (kinaesthetic sensation). At this point consciousness intervenes to appraise the success of the movement with reference to the dominating need. The collaboration of movement and appreciation creates a new situation which in turn creates a new movement and new appraisal of its worth-whileness to the contemplated adjustment. Purpose and movement are thus constantly reinforcing each other until the adjustment is completed. The end sought and its fulfillment he called *function:* hence

"Functionalism." Today Functionalism accepts Dewey's conclusions. It agrees with Angell in defining it as a "study of the responses of the whole individual rather than an investigation of the movements of any single part of an individual." Body and mind function as a unit. It does not attempt to differentiate psychology from physiology, the psychological processes from their physiological counterparts. It postulates a consciousness, but is more interested in its functions than in its states. Intelligence, for example, is considered an adaptive instrument effecting changes in the environment by thinking its way through complex situations. This interpretation differs from the idealistic conception of it as a capacity for creative reflection issuing in hypotheses conceived independently of the importuning situation.

The Functionalist investigates such problems as mental imagery, memory, imagination, and judgment. He is content to leave the investigation of neural activity, the constitution of mental states, to physiologists and neurologists. He takes the mind as he, or rather as his introspection, finds it — the study of consciousness revealed by the experiencing self reveals it to the trained and critical observer. It is, of course, obviously pragmatic and concerns itself with pragmatic implications of psychology. The subjoined diagram may aid in the understanding of its processes.

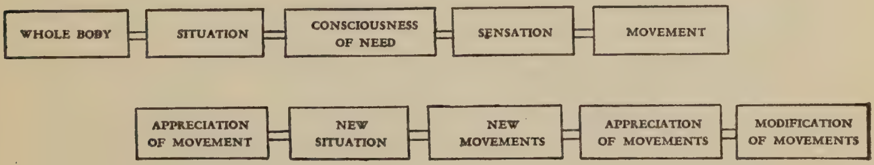

Figure 1.

THE EXPERIMENTAL METHODS OF THE NEUROLOGICAL SCHOOL

Science has been defined as systematized knowledge. The urge to systematization asserts itself whenever facts become numerous enough to challenge the mind's capacity for absorption. As an aid to assimilation, facts are classified on the basis of similarity and difference and the resulting groupings are then envisaged as wholes. With these as a starting point, the quest for facts proceeds apace. To achieve this objective, resort is had to observation and experimentation. Science has followed this pattern; so has psychology.

The preoccupation with classification had resulted in a neglect of the validity of the facts as facts. With increasing insistence the question was asked, "what is a fact?" The answer had to await the discovery of the Scientific Method (It is also known as the Experimental Method). The qualification "scientific" rests on its thoroughness and efficacy. It is composed of four steps.

First: The recognition that all data are discoverable by observation. In the natural sciences these data are observable to the senses; in psychology, they are observable to consciousness.

Second: These data must be amenable to the formulation of hypotheses. The more competent the hypothesis, the greater the fruitfulness of the experimentation which it initiates.

Third: The hypothesis must be tested. The test is successful in proportion to the thoroughness with which data are isolated and to the adherence to the principle of variable constants. Dealing as psychology does with mental facts, like memory, care must be exercised to confine the experiment to a specific datum. In testing memory, the experimenter must limit the experiment to a special type of memory, such as verbal memory or logical memory. It is further enjoined upon the investigator to maintain the constant, *memory,* free from the influences of the emotions and also of the will. These considerations are vital for psychological experimentation. They are absent in the physical sciences, for uniformity that reigns there makes scientific data invulnerable to the variability induced by mental states.

Fourth: The procedures employed must be susceptible of reproduction. Given the data and the conditions under which the investigation is carried on, other investigators may repeat the experiments.

Psychology took over this method and adapted it to its needs. The adaptation included the use of mathematics as an aid in summarizing the findings of investigators. Statistics became the handmaiden of experimentation. The mathematical interpretation of psychological data was applied in the early part of the 19th century. It began with the introduction of the Gaussian curve, or the curve of error. It is founded on the method of least squares as applied to the theory of probability of errors in observation. It assumes that measurements (like the height of individuals) are subject to chance variations solely, and therefore, may be arranged in a form that represents a bell shaped curve. As the number of measurements increase and the "chance" errors are eliminated, this curve constitutes a "normal" distribution which corresponds to the actual distribution obtaining in nature.

When applied to psychological data, serious defects soon become apparent. In the first place, scientists deal with objective data and with errors that arise from faulty observation. Psychology deals with subjective data and observation plays an important part. For the scientist, the Gaussian curve is employed to correct errors in observation. The psychologist erred in considering errors in observation on a parity with chance variations from a true measure. In the second place, the scientist's assumption that the conditions of measurement are uniform except for chance variations of the Gaussian variety, does not hold for psychology. When the physicist measures a bar of steel it is presumed to be a fixed quantity and no matter how often it is measured it remains constant except for changes in temperature. But in psychology, practice effects work a change in the phenomena observed and the first reaction differs markedly from the last. What is measured is not a uniform response which reflects the intensity of the stimulus involved but a series of responses which gain in clarity and definiteness as the process of habituation steadies and crystallizes.

Finally, the reliability of the Gaussian curve is enhanced as the number of measurements increase. Dealing as psychology does with data of demonstrable variability as between individual and individual and, to almost equal degree, in the same individual, the validity of any inference depends upon the faithfulness with which the data under consideration reflect the reactions of a representative cross-section of the population. Inferring that statistical refinements, such as standard deviation and probable error, may eke out the dearth of psychological data, can only be justified on the assumption that their normal distribution is Gaussian. Unfortunately, this is a tenuous assumption.

Equally inept is the application of the concept of correlation. It is a highly effective statistical tool when applied to the collection of data that possess Gaussian properties. But in psychology the search for "normal" distribution is still the elusive goal of experimenters who are far too prone to mistake "symmetrical" distribution for "normal" distribution. Hence the wide use of the coefficients of correlation in educational psychology registers correspondences that are predominantly statistical. The discovery, for example, that ability in long division correlates highly with intelligence is a statement of a tendency that cannot be dignified into a "law" of mental activity. To the investigator it merely proves that there is a correlation in the array of distributions under scrutiny. But it does not prove that that particular relationship is the one the experimenter hoped to find there.

Despite these shortcomings, the scientific method has measurably benefited psychology. The impressive array of tests and scales has implemented educational and vocational programmes. The educator and the vocational counselor are employing these instruments with considerable success. The growth of tests of personality are attaining a merited vogue even though the methods employed in constructing them bear too heavily on statistical interpretation. They constitute an advance upon observation into which personal predilections, wishful thinking and unconscious bias too often enter as disqualifying elements. They also serve as a sort of "lie detector" with which to check educational practices and to evaluate the classes of theories. As the techniques become refined experimentation in the field of psychology may, in time, so nearly approximate the rigid rules laid down by scientific investigators as to reduce to a minimum the introspectionist ingredient in observation and the unpredictable diffusion of mental states. But as long as experimenters cannot achieve a separation of the emotional ego from the intellectual ego, and as long as states of consciousness cannot be congealed into specimens or isolated into discrete processes, the practices of experimental psychology will continue to be diluted with pseudo-scientific procedures. Yet it will serve to warrant the qualification "scientific" when viewed as a determination to exclude excessive speculation and to temper the theorizing proclivities that derive from an exclusively imaginative approach to phenomena.

CHAPTER II

PSYCHOLOGICAL ISSUES IN PERSONALITY STUDIES

THE RÔLE OF INSTINCTIVE TRENDS OR URGES IN THE NEUROLOGICAL SCHOOL

IN the classification and description of instinctive trends and urges the neurological school follows more or less strictly the line laid down by William McDougall. In the formulation of the tendentious nature of man's endowment he employs the term conative tendency or instinctive motives. He recognizes three distinctive features of instinctive behavior.

(1) The instinct is activated by a specific type of stimulus; food and the stirrings of hunger. (2) The instinct is colored by emotional quality peculiar to it; the restlessness that accompanies hunger. This feature had latterly received less emphasis at his hands. (3) The organism reacts to the exciting stimulus in a specific mode of behavior; the sight of food is followed by a reaching-out movement.

A. Campbell Garnett objects to this criterion as totally inadequate on the score of its predominantly biological bias. He is inclined to elaborate upon McDougall's suggestion that an instinct be defined "by the nature of the goal, the type of situation that it seeks or tends to bring about." This definition shifts the emphasis from stimulus and reaction to the purposive aspect of the instinctive activity. But it is not enough to state that the end sought is dictated by biological utility. There is a psychological factor in the instinctively perceived situation that derives from the recognition of its meaningfulness to the individual and of the satisfyingness that accrues from the successful consummation of the instinctive process.

True, there is a satisfaction latent in instinctive striving but it does not become explicit until the end-experience has been evaluated and the striving has been brought to an end. To reach that end it may be necessary to encompass intermediate ends until the striving or conation is finally satisfied. When the instinct of curiosity is aroused by a novel situation, the individual does not envisage the form which the final experience will assume until the state of quiescence, the terminal of the instinctive process, is attained. That the mere manipulation of the intriguing situation is not enough is evidenced by the fact that when curiosity is thwarted the individual makes an effort to counteract the obstructing influences because, in the event of failure, the instinctive urge continues to fret the individual until a pleasurable experience sets it at rest. This conception of the true inwardness of instinct is psychological in that it posits a conscious striving after a pleasurable termination of the instinctive process.

Now, each instinct finds satisfaction in specific kinds of meaningful end-situations. They also respond to specific meaningful stimulus-situations; the task of enumerating the human wants should therefore resolve itself into an effort to list all stimulus-situations with their corresponding end-situations; *i. e.*, to consider all human wants and their satisfactions. But instinctive wants have other distinguishing characteristics: (1) They are common to the species — they are innate. (2) The stimulus that sets them off is "casual and external" and not "recurrent and internal" as in appetitive wants such as food-seeking and sex-behavior. In food-seeking, for example, the structure and functioning of the body provide the relevant stimulation. It recurs whenever hunger is felt. Stimulation, therefore, is internal and recurrent. In repulsion the stimulus is external — offensive smells and tastes — and its occurrence is casual. These distinctions, however, do not sharply demarcate appetites from instincts because the appetitive factor becomes merged with the instinctive ingredient. The stimulation to eating may be casual and external. The sight and smell of food, or even the thought of it, may, unless inhibited by an acute sense of repletion, act as a fillip to even a jaded appetite. Here physical appetite is superinduced by a purely psychological urge, a decidedly external conditioning leading to an end-experience capable of setting the conation at rest.

The psychological process by which the cognition of the stimulus activates even a dormant and lethargic instinct emphasizes the elements of experience and meaning and creates a doubt as to the absolute innateness of instinct. For awareness of meaning is learning and the moment learning intervenes, the response it inaugurates is acquired and not unlearned. Instinct and learning become merged into one unitary process, thus attenuating each to an aspect of adjustment.

The need for sharply demarcating learned from unlearned responses is vital for education. If the instincts are data for psychology then the educator must gear the educational machine to them. The educative process resolves itself into a force for their direction and modification. The tempo of educational progress may be retarded or accelerated according as the strength of the instinctive drives are counteracted and moulded by educative environmental forces. Education may thus be assimilated to a project in engineering in which human skill and enterprise are pitted against forces of nature. On the other hand, if capacity for learning depends less on the dynamism of instinctive tendencies and more on the exercise of intelligence manifesting itself through prevision and cognition of the significance of stimulus-situation, then education must preoccupy itself with multiplying opportunities for distilling meaning out of environmental forces to the end that foresight might translate it into behavior favorable to the enlargement of personality.

This, in effect, is the contention of the Gestaltist. Instinct, he asserts, is not a distinct entity. Nor is it suited to the exigencies of adjustment, for it is blind and therefore its activities are fortuitous. Even the proponents are driven to postulate an intelligence, however rudimentary, back of instinctive force — an intelligence that endows it with the capacity to modify stimulus-situation for the greater satisfaction of the relevant instinct. The Gestaltist calls this directive faculty insight. It is not superadded to instinct. It is not the eyes of instinct; it constitutes its very mind. It is the innate capacity, laid down in the germ-cell, which enables the structures and mechanisms created by a process of evolution to so adapt themselves to environmental demands as to promote the maturation of the organism. The individual is acquisitive, curious, assertive, submissive, retractive, pugnacious, constructive and predatory because these attitudes are fruitful of satisfying adjustments. It is not necessary to predicate a separate existence for each impulse. They are modes of orientation of the whole personality, deeply rooted in insight and called into requisition, singly or severally, at its behest. Insight obeys the laws of dynamics governing all systems of energy. All situations are disturbers of the human energy system. They set up stresses that must be resolved. Resolution takes place according to the law of least action, *i.e.*, the individual responds in the most direct way his bodily mechanisms permit. Such adjustment effects a change in the entire organism. The level of maturation had been advanced. As a consequence insight had been sharpened and whetted for a higher and more complicated adjustment. The progression is from insight to stimulus-situation with its resulting accretion of maturation or higher level. This is learning by adaptation of existent growth potentials to environmental stimuli. The concept of instinct is superfluous; it only complicates educational theory; and the chief concern of the educator is the manipulation of the environment so as to present to the individual structured configurative wholes adapted to the maturation level of the individual. Wheeler incorporates these requisites into two rules: "First, the learner, whether an animal or human being, must be maturating, and in the long run, confronting a situation that furnishes external stimulation. Second, the learner must be interested; he must have the will to learn. In other words, he must be under tension to some goal."

But whether the instincts are innate responding mechanisms or attitudes permeated by insight, a description of their workings should be of interest to the student of psychology. Psychologists differ as to the classification principle invoked. Garnett employs the criterion of "end-experience" in which alone the respective conations (of the instincts) can be satisfied. Upon this basis he recognizes the instincts of escape, pugnacity, repulsion, curiosity, acquisition, construction, hunting, parental care, gregarious behavior, self-display, leadership and submission in addition to hunger, sex, and sleep which contain a large admixture of appetitive dynamism. The Behaviorist, while subscribing to the criteria of innateness and mechanization of response, gives full consideration to the degree of derivativeness from so-called primary tendencies of the unequivocally unlearned type. Three such tendencies are recognized. Each one has a correlative emotional tendency.

All others enumerated above are derived from this primary energy or driving power by differentiation through acquired experience. They are formed by a consolidation between innate and habitual factors. Freud posits an all-embracing sex instinct reenforced by a host of vague instincts of lesser potency. Stekel, a dissentient from Freud's teachings, restricts the number of instincts to the sexual urge and the instinct of self-preservation. Adler sees but one dominant tendency, the maturation of the ego, with its correlative self-regarding tendencies. Roback's studies in character have inclined him to postulate the presence of another instinct, the urge to consistency, that enables its possessor to distinguish between the rightness and wrongness of behavior, though the weight of authority is thrown to the claim that moral judgment is the product of experience in situations evoking social approbation or disapprobation. McDougall enumerates many instinctive tendencies: the tendencies of fear, anger, tenderness, curiosity, sex, gregariousness, assertion, submission, repulsion, hunger; the tendency to cry aloud for help, to hoard, to build up, and to make merry.

The urge to systematization has prompted psychologists to seek for a unitary principle under which to subsume the multifarious instincts. They therefore abstracted some fundamental element common to many. Thus instincts have been grouped into (1) the self-preservative, (2) the assertive, and (3) the gregarious or "herd" instincts. The first group displays a predominantly biological, the second, a psychological, and the third, a sociological orientation.

Of the more important impulses we may note: (1) self-preservation, (2) self-assertion, (3) race preservation (sex), (4) curiosity (investigative impulse), (5) acquisitiveness, (6) constructiveness, (7) gregariousness, (8) consistency (consistency urge).

The above classification of impulses does not exhaust the varieties recognized by psychologists. Nor is it reduced to its lowest terms. Some psychologists include the preservative impulse, acquisitiveness, curiosity and constructiveness under self-assertion, regarding each of these manifestations as contributants to it. Still others seriously question the existence of self-assertion as an innate tendency, attributing its qualities to the influence of environmental forces: self-assertiveness, they contend, is an acquired characteristic. A similar stricture is made against the consistency urge which constitutes for idealists the *sine qua non* of character formation.

The consistency urge is postulated by A. A. Roback in his *The Psychology of Character.* His observation of children's conduct has deepened the conviction that man is endowed with a sense of justice, the capacity to put oneself in the other fellow's place. This explains why many educators advise parents and teachers to "reason" with children as a corrective to misbehavior. The child who is prone to take away his playmate's toys may respond to the admonitory query "How would you like to have some one take away your toys?" He is not averse to substitute for it, at the behest of critics, that quality of pliancy known as suggestibility. But whether we call it consistency or suggestibility, it is innate.

Impulses possess two outstanding characteristics: They press towards overt behavior with extreme urgency and, conversely, they display the power of inhibitability. Individuals differ as to urgency and inhibition; so do the impulses differ in strength in the same individuals.

Ideo-Motor Tendency of Impulses: The thesis has been advanced that impulses remain in a state of quiescence until aroused by appropriate stimuli. The manifestation of their activity, behavior or response, follows upon the confrontation of the situation consonant with it. This reciprocal relation has been compressed into the S-R (stimulus-response) formula. The presence of a toy energizes the acquisitive impulse and the child so exposed reaches for it. On the other hand Thurstone is of the opinion that this reaching forward in the case of the acquisitive impulse is not motivated by the perception of this toy. On the contrary, the impulse has been galvanized into action by the life energy at the command of the individual owing to his pressing need for acquisitive satisfaction. The accidental presence of the toy but serves to give to the impulse an axis of direction towards a possible satisfying behavior. Any other manipulative object would have been seized upon with equal alacrity, because the impulse was in full flow in its onward sweep towards actualization in conduct. This is the psychological explanation or what in common idiom is known as impulsive action, and this impulsiveness is a characteristic of all human activity unless obstructed by inhibition. The inhibitory mechanism resides in the nervous system. Its seat is in the synapse of the neurones. The direction is always from axone to dendrite and reversibly from dendrite to axone. Stimuli foregather at the synapse and thus reenforce each other to the end that a weak impulse may accumulate sufficient energy to be passed on. This summation of stimuli is necessary to overcome the natural resistance encountered at the synapses. Resistance is overcome whenever conduction along specific axones is repeated, as in habit formation. Affective states (feelings of pleasantness and unpleasantness) are thought of as centering at the synapses. When resistance is strong, as in fatigue or boredom, a feeling of unpleasantness follows. The infliction of punishment is productive of the same affective state. So is a state of tension, as when two impulses run counter to each other. The impulse of self-assertion may become obstructed by that of self-preservation: an individual may deem caution the better part of valor and so inhibit the instinct of pugnacity in the face of formidable opposition.

Now, this synaptic resistance lies at the root of inhibitability. Its innateness is conceded by most physiologists though not all ascribe its intensity to the same cause. Some attribute it to chemical action within the nerve cells; others to metabolism; still others, to endocrine action. Whatever its physiological substrate, it is a given quality for each individual though modifiable by habit and deliberation. An act performed continually tends to break down synaptic resistance. Deliberative thinking that considers possible consequences may by the very retardation of the impulsive movement decrease or increase its velocity provided reason dictates its obstruction or facilitation. This circumstance affords the *raison d'être* for educational endeavors to regulate conduct. If resistance at the synapse were an unmodifiable quality and quantity, education would be fruitless.

Emotions and Emotional States: Characteristically, Behaviorism considers emotions as bodily and visceral states aroused by an environmental (peripheral) stimulus. In the early manifestations of rage the hands are clenched and the endocrine glands pour their protective secretions into the blood stream. The stimulus is a fear-producing object or a word that becomes associated with it through conditioning. This explanation is seemingly not in accord with the James-Lange theory which considers the emotion as the consciousness of bodily and visceral disturbances rather than their mere manifestation. It is formulated in the epigram that "we run not because we are afraid but we are afraid because we run." But there is no consciousness for the Behaviorist and the emphasis on muscular and glandular activity makes them kin. Their kinship is more closely cemented by the fact that emotional states, according to both theories, are closely followed by the appropriate emotional responses; visceral changes and bodily adjustment (running away in case of fear) are related as antecedents and consequents.

There exists a conspicuous lack of agreement among psychologists as to the number of discrete emotions. Watson contents himself with three: rage, fear and love. All the others recognize varieties, such as sympathy, pity, reverence as but derivatives. Thus gratitude is thought of as an amalgam the alloys of which are tenderness and self-submission and both arise from the primary emotion "love." Cyril Burt recognizes two large classes of emotions, the sthenic and the asthenic. The former may be termed the aggressive state and include anger and rage. The latter are the submissive emotions such as tenderness, grief and fear and are inhibitory rather than provocative in their tendencies.

Characteristics of Emotional States: Emotions, like impulses, exist in varying strengths in different individuals and in the same individual. It would appear that their degree of intensity is predetermined by heredity. Between impulses and emotions there is the closest affinity, for the latter become activated when an impulse is obstructed. This check to self-assertion produces emotional accompaniment of impulsive activity and operates to clear away obstructive stimuli from the path of the onrushing impulse, which gains thereby in ideo-motor propulsiveness. This quality of aggressiveness is not displayed by the asthenic emotions which serve the equally adjustive purpose of warning the individual that the obstruction has the power to thwart the impulse at every turn. When an environmental force cannot be subjugated readily the feeling of awe may serve, for some individuals, to rob the defeat of its sting. An insurmountable difficulty such as a monitory "Don't" delivered with impressive finality may at times convince the individual of the hopelessness of aggression and of the advisability of seeking satisfaction of the impulsive urge in an indirect and devious way.

An unleashed emotion also facilitates impulsive adjustment through its tendency to nullify the efforts of intelligence to put the brakes on precipitate action. It is a platitude that rage is unreasoning and that rational conduct may not be expected in the individual dominated by a rampaging emotion. Many a contrite individual has become convinced by repeated failure of the futility of stemming the emotional flood with the cautionary "count ten." When the emotional current attains torrential proportions a precept, even if it is available at the crucial moment, is apt to prove too frail a support.

Emotion and Sympathy: We have seen that visceral disturbances in emotional states are accompanied by bodily changes designed to facilitate their expression. In rage, the muscles are tense and the facial expression assumes a characteristic pose. Conversely, the bodily and facial set tends to reinstate the visceral changes inseparable from them. This enables the individual to arouse emotions at will and to discover the emotional states of others through an interpretative contemplation of their bodily sets. The gregarious impulse, a biological counterpoise to the fear, innate or acquired, of being left alone thereby enhances its potency, for it enables the individual to become acutely aware of the emotional atmosphere that surrounds his group. In time it becomes fairly easy to feel with "people"; and emotional identification with one's group makes for the protective assurance of solidarity. This ability to feel oneself at one with the group is at the basis of sympathy.

Sentiments: Impulsive activity implies the existence of an environment. One cannot exercise the instinct of curiosity unless there are objects which might be investigated. It also implies conflict; for other individuals are competitively arrayed against each other for the control of these objects. Out of these conflicting interests and desires, there flows feeling of likes and dislikes depending on whether the individual has come off victorious or not. Psychologically these species of response are called sentiments. Popular usage distinguishes sentiments with regard to occupations, hobbies; sentiments involving standards of behavior, principles; and those readily realizable as ideals.

Structurally, a sentiment contains a nucleus of objects, persons or ideas held in a matrix supplied by an impulse. Its initiatory step is the impulse and its terminus an object, person or idea. Curiosity expends itself, say, upon an object and when successful manipulation is pleasure-toned, an interest is born. This interest is fostered by other impulses. The boy who develops an interest in flowers may call into requisition other impulses, such as the impulse to collect, the impulse to construct and that of self-assertiveness in safeguarding the fruits of his labors. In time these subordinate instincts become organized around this hobby forming a centre of potential activity powerful enough to inhibit any impulsive activity that threatens the unrestricted operations of the sentiment. The boy who is interested in botany may successfully overcome his fear of climbing mountains if such inhibition will bring him a choice specimen for his collection.

Complexes: The untrammeled flow of an impulse leads to satisfaction. It serves as a "dam" which impounds the impulsive energy behind it. That energy cannot return to its source; the pressure exerted at the energy-source by reason of its ideo-motor impulsion is too great. Its propulsive concomitant, the allied emotion, but reenforces the pressure. If the "dam" is too powerful to be swept away, the impulsive current proceeds to explore it for some means of liberation, more often than not of an anti-social nature. The boy whose self-respect has been humbled to the dust may seek a balm to his wounded feelings in foolhardy behavior calculated to evoke the approbation of his group. He may attempt dangerous tricks or essay rash feats of strength.

The boy whom the environment has deprived of opportunities for self-assertion may find expression for domination in torturing animals. But even these substitutive activities fail to bring relief. Then the impulse attaches itself to the obstructive stimulus to form a sentiment of a high emotional tension which, consciously or unconsciously, influences future conduct to the detriment of the individual thus afflicted. Such a sentiment is called a complex.

Freudian psychology has often given the complex a flavor of neuroticism. Yet complexes may have a normal setting without any pathological tinge. Definite urges, whether innately given or acquired through habit, may be prevented from reaching satisfying overt behavior even in the most favorable of environments owing to recurring clashes between self-regarding and altruistic impulses. Again, the strength of the drives may induce a chronic state of restlessness that favors capricious and even anarchic behavior. The accompanying affective state is one of bafflement. This feeling, in turn, but serves to obstruct the impulsive channel so that the impulsive energy tends to seek relief from restraints in any activity that promises even temporary relief. Symonds characterizes such behavior as "emergency reaction."

Driven by impulses, the individual must make some attempt to find an outlet. There then ensues a conscious search for a mitigating stimulus and as a consequence, the threshold of consciousness for such stimuli is considerably lowered. In other words, the mind becomes acutely sensitized to those environmental forces which, in the past, have led to the satisfaction of the urge. The boy whose class standing has suddenly been lowered to a dangerous level sending his chances for promotion aglimmering, may yield to the temptation of cheating in examinations. He may continue to resort to copying when an emergency arises and he may become adept at embracing opportunities for cheating.

The explanation of complex-driven behavior may apply to neurotic behavior. The physical symptoms of illness that often accompany a state of neurosis may be but an augmented sensitivity to aches and pains that normally do not pass the threshold of consciousness. The sudden awareness of physical discomforts revives in the memory former states of illness with their attendant manifestations of parental solicitude. Gradually illness comes to be looked upon as an escape from a difficult situation and consciousness becomes still more sensitized to these comforting stimuli: the disturbed digestion, the brown taste in the mouth grow into formidable symptoms that afford the patient the opportunity to shut out the harrowing situation. Thus in mental health and disease, the complex is symptomatic of the struggle every individual wages with more or less impetuosity against the obstructive forces generated by the constricting environment and by the conflicting impulses.

PSYCHOLOGICAL DETERMINANTS OF CHARACTER

Instinctive drives lead to reactions. In unorganized states they are known by the comprehensive term *behavior*. When behavior becomes systematized and oriented towards social demands, it is called conduct, and conduct is the raw material of character. These refinements are attained through psychological forces that act as determinants of conduct.

Habit As a Determinant of Conduct: The instinctive drive must seize upon some medium to facilitate its discharge. The bottle constitutes for the infant a satisfying mode of appeasement of the hunger drive. As it grows older it finds in other "stimuli" equally satisfying media. This association of impulses may be said to form a habit. Other habits do not grow out as directly from impulses. In manipulating the bottle the child may learn many ways of abstracting the nourishment therefrom. It may grasp it with both hands, it may sit up or lie down, it may learn to prefer a black nipple to a colored one. The instinct of gregariousness may involve in its fulfillment the acquisition of many habits calculated to win the approbation of the group through the activity of imitation and suggestion. The more complex habits, such as dressing or writing, may also be traced to antecedent impulsive urgency. The other ingredient of habits, both simple and complex, is a stimulus or a succession of stimuli. Upon becoming thoroughly articulated through repetition, the initial stimulus in a habit chain can reinstate the entire chain of responses without consciously provoking into activity the associated impulse.

Behavior which follows the presentation of a specific stimulus or group of associated stimuli is called a specific habit. In a continuously changing environment, however, the chain is apt to appear with additional links or with one or two links missing. It would, therefore, profit the individual to learn how to make the appropriate response to the significant members of a chain. For example, honesty is a general name for manifold unit-wholes strung together on a thread of morality. There is the specific reaction to honesty involving money, honesty involving cheating, and honesty involving conduct that lacks standardization. There are those who consider cheating the conductor of fare as compatible with moral worth. It is important for the educator to know whether the child would be stimulated to form specific habits to meet all discrete situations or whether he might resort to the inculcation of generalized habits, habits that would function in situations involving common elements which at one time or another constituted the specific situations.

The answer may be found in the physiology of habit formation. A habit has been represented as forming a path in the nervous system. In complex habits, as in learning to write, the nervous energy released by the impulsive urge, traverses repeatedly a certain neurological path from the central nervous system to the muscles of the hand. The deepening of the path constitutes learning and its plateaus are the intervals in which this channeling in the nervous system is supposed to take place. Thus conceived, all attempts at writing subsequent to the formation of the neurological mechanism, if and unless it follows closely manipulative procedure perfected by practice, should prove abortive. Yet, as Fox points out, one's signature which shows remarkably little variation in contour no matter how often repeated, may be readily traced with one's toes. Now the toes were never a part of the writing mechanism: they were not originally integrated in the corresponding neurological mechanism.

Seemingly habit formation is not explicable in terms of paths in the nervous system. Habit-complexes are less mechanical in their constitution. Their component units are not built in. Rather are they the results of unitary bodily adjustments to the Gestalt or configuration inherent in them and the plateau is that stage of the learning process which attunes nerves and muscles to the whole of the habit-complex. The individual envisages a habit as a musician becomes aware of a chord: he does not single out each individual note but grasps them as parts of a closely articulated pattern with its dominant and subsidiary elements indissolubly bound together. In no other way can we explain why sensible variations in the setting do not unsettle a habit once formed.

If a habit is ruled by its configural bias, generalized habits are possible. It may function in its pristine condition and by transference, in situations in which, while maintaining its basic configural arrangement, it still undergoes a decided re-alignment of, and even additions to, the original ingredients provided however, that the learner has consciously recognized the underlying configural relation of the units in a habit-complex.

Confacts and Traits As Determinants of Conduct: Psychologists who reject the claim that generalized habits can be made to function as determiners of conduct have advanced the theory which purports to account for moral conduct by the operation of what Symonds calls "confacts" and traits. Confacts are concepts involving behavior rather than knowledge. The concept "table" is formed by abstracting from the percepts of varying tables the elements common to all contrivances bearing the name of table. In like manner all responses comprehended under the term honesty may be consolidated into a confact sustaining the same relation to discrete acts of honesty as the concept "table" does to "tables." Trait is something employed as synonymous with confacts, though, Charters elevates it to the dignity of a "faculty," an acquired capacity to react uniformly to moral situations having a common bond.

Ideals As Determinants of Conduct: Conduct as confactual adjustment to moral situations is deemed superior to the explanation of conduct as motivated by ideals. It is contended that ideals though surcharged with emotion are fundamentally general ideas, and general ideas, such as honesty and untruthfulness, are powerless to provoke responses because a verbal stimulus is not prepotent enough to produce a reaction; it can only acquire stimulative properties when it has become associated with a non-verbal one. When a child has learned to be honest in a given concrete situation, the ideal of honesty may be superimposed upon it. Besides, honesty and truthfulness operate in diverse situations some of which are not easily recognized as their embodiments. For example, Upton and Chassel in their "A Scale for Measuring the Importance of Habits of Good Citizenship" deem that individual a good citizen who among other virtues is honest and truthful in that he:

1. Tells the truth without flinching or compromise.
2. Faces facts squarely and does not allow himself to be misled by prejudices.
3. Does not copy another person's work.
4. Does not take the property of others without their consent.
5. Endeavors to restore lost property to the rightful owner.
6. Does homework entirely himself or with only such help as designated by the teacher.
7. Makes a straightforward recitation.
8. Avoids exaggerations.
9. Does not pose.

But moral ignorance rather than conscious delinquency may explain lapses from moral conduct, for an atmosphere of mutual helpfulness in school work may distort one's moral vision: the child may not form a clear-cut line of demarcation between the copying as co-operative helpfulness extended by one student to another, and copying as downright cheating. Again scrupulous honesty in the return of found articles may be deemed compatible with the retention of a pencil or eraser whose value is negligible or whose ownership is difficult to trace. The confactualist would so arrange the environment as to create the opportunity to learn honesty in all its multitudinous ramifications, while the idealist would inculcate the ideal of honesty as a standard of conduct against which concrete situations may be evaluated for their moral worth; hoping for reenforcements from the generalized habit of which the specific habit is the nucleus.

The idealists' position is not invulnerable. In the first place, they have confused the ideal as psychological entity and the ideal as a pedagogical tool. They are justified in attributing to it the potency of influencing conduct, for fundamentally the ideal and the confact are but two aspects of the same mental state. In infancy conduct is overwhelmingly specific and grows through confacts to ideals. They are not present as ideals but the process of generalization gradually passes over into idealization when conduct becomes charged with the emotions arising from the approbation of those concerned with its inculcation as habits. The idealist errs, however, in assuming that the ideal can be taught as maxim or precept independently of practice and can precede practice; that exhortation to be honest is the surest way of inculcating honesty. The ideal must first be felt as a necessity before it can be accepted as an injunction and only life can endow it with imperativeness.

Secondly, ideals for the child do not exist as categorical imperatives even though both parent and teacher may so represent them. The innate glimmerings of justice, the instinct of "oughtness" predicated by idealists, are but germs in the process of incubation, a process that cannot be unduly hastened. Else "oughtness" when rigidly enforced may assume the aspects of tyranny and may become nullified by the instinct of self-assertion. The child must feel that at every stage of his development, the "ought" of any conduct response is valid for him because he is enabled thereby to further what to him are legitimate means of satisfying impulsive urges. Granted that conflicts between impulses and environmental forces are unavoidable, incalculable harm may be done by precipitating them at a time when reason is not sufficiently mature to act as mediator.

Rousseau's method of inculcating moral conduct illustrates the ineptness of such procedure. In the *Émile* he reports the dialogue between master and child:

Master: You must not do that.
Child: Why not?
Master: Because it is wrong.
Child: Wrong! What is wrong?
Master: What is forbidden you.
Child: Why is it wrong to do what is forbidden?
Master: You will be punished for disobedience.
Child: I will do it when no one is looking.
Master: We will watch you.
Child: I will hide.
Master: We shall ask you what you are doing.
Child: I will tell a lie.
Master: You must not tell lies.
Child: Why must I not tell lies?
Master: Because it is wrong, etc.

"That," Rousseau comments, "is the inevitable circle. Go beyond it and the child will not understand you."

Modern psychology maintains that we can go beyond mere exhortation. Wrongness and rightness in their germinal form are not self-operative. They must be developed and the process of growth leads to experiences which are not frustrated by the arbitrariness of imposed commands whose reasonableness are not obvious to the child. This does not mean that one should reason with children. The multiplication of such alternative responses with their attendant feeling of satisfyingness can only come through intimate contacts with the environmental forces. Then, and then only, can reasoning suggest substitutive conduct for responses originally made under the direct spur of impulses.

Feelings and Emotions As Determinants of Conduct: It has been maintained on physiological grounds that feelings of pleasure or pain do not operate as determinants of conduct. The same reason is advanced for the rejection of the claim that the emotional component of an ideal initiates conduct as readily as the consciousness of the imperativeness of its correlate, the idea. The argument proceeds as follows:

1. Feelings are not a part of any reaction system. They can be localized in any part of the nervous system. Again the feelings of pleasantness and unpleasantness, of pleasure or pain, do not precede the response but are experienced after the response is made. According to Symonds, "One does not first attend to an object and later have a feeling concerning it. The feeling is part of the original response." The feeling is simultaneous with the reaction and not antecedent to it.
2. Feelings in themselves do not further the upward swing of the learning curve. Thus fatigue with its tone of unpleasantness may co-exist with a creditable learning tempo.
3. The feeling tones have a synaptic reference. They arise from a state of "readiness" or "unreadiness" at the synapses independently of the external stimulus. If the nerve fibers are rested as a result of a favorable metabolic state, they tend to respond in a manner felt as pleasant. If unduly fatigued or undernourished, the reaction is tinged with a feeling of annoyance or distaste.

These synaptic states produce a state of "readiness" or "unreadiness" of the reactive system. But these conditions are facilitated or retarded by (1) the internal organic drives, (2) the presence of fatigue, and (3) the existence of bonds which, in the past, have employed some nerve fibre as connective threads. In other words, a state of readiness presupposes the irritability of an instinctive urge questing for an alleviating stimulus, the absence of fatigue and the recall of former responses (habits) which have facilitated such alleviation. Insofar as it is influenced by previous habits, the state of readiness and its pleasure tone is not a determiner of a new unrelated habit. It merely aids in the enrichment and expansion of old habits.

In like manner, emotions manifested in one's adherence to ideals, as love of truth or love of honesty, are insufficient to influence the direction of moral conduct. For the emotion of love experienced when an ideal is embraced wholeheartedly wells up after habits of truth-telling and honest dealing have become ingrained responses to situations involving the above virtues. We love truth because we are truthful.

These views follow logically from a behavioristic conception of conduct. Habits do make conduct but habit is not a mere impingement of stimuli upon the nervous system deepened by repetition. It is rather an act of insight into the configural significance of the component stimuli, an awareness which gains in meaning in proportion as it is recognized how fully the habit may minister to the impulsive needs of the individual; and with the dawning of its survival value, the accompanying feeling of pleasantness becomes welded to it in the very act of responding. There is no need of explaining feelings in terms of synapses and reactive systems; in configuring adjustment. The individual acts as a unit and makes the appropriate response with all the nervous and muscular resources at his command. The subsidiary mechanisms are thrown into activity by the total energy available, and not by the overflow which had drained off into individual synapses. Feelings may be experienced without the intermediation of neurological mechanism whenever the individual is constrained to make an adjustment.

Feelings and emotions, then, are as truly determiners of conduct as habitual responses because the responses to purely configural stimuli are influenced by feelings. A state of satisfyingness is induced directly the individual senses their significance for the impulsive self. For from the very nature of configurations, they must be meaningful and meaning inheres in their potentiality to further self-expansion. It, then, becomes a psychological impossibility to love truth without familiarizing oneself with truth-telling. One cannot normally form an ardent attachment for anything that does not exist for that self. Truth as a concept is a product of higher mental processes and attains reality for the immature mind when it falls into a configuration. Truth in the abstract must make its appearance in a situation involving truth-telling as a relevant response. When this situation is envisaged as patterned in structure a feeling of pleasantness arises simultaneously with this act of insight and the response is swift and unerring. We, therefore, love truth-telling because it arouses this sentiment and from truth-telling it overflows to truth. But love of truth does not come after a long apprenticeship in truth-telling. It is more proper to say that when we come to love truth-telling we become at the same time enamored of truth because truth-telling as a habit is easily generalized into a confact provided the situation embodying truth-telling is presented as a configural whole.

"Attitudes" As Determinants of Conduct: Similar strictures have been made against the determinative influence of attitudes. Since various meanings attach to this term we shall discuss the more important ones. May and Hartshorne equate attitude with behavior tendency. They assume that "by the time a child reaches the fifth grade he has more or less permanent sets or attitudes towards cheating in school work. He may be set against it, or be in favor of it, or be neutral towards it." Now as far as this tendency is a set or readiness, it may be inculcated through repeated contacts with specific situations of configural texture. Mere iteration of narrowly defined situations, as cheating in classroom work, even if practice is extended to many ramifications of cheating, will not produce a set for honesty. These situations must first be presented as a configuration, *i. e.,* the cheating phase of copying must be clearly understood by the prospective practitioner of honesty. Secondly, both immediate and remote consequences must be unobstrusively exposed so that the child will perceive the effects of cheating upon one's future scholastic progress and upon the reaction of the group towards infractions of honesty envisaged as an ideal. This does not mean that one must make cheating focal in an atmosphere of honest performance, for a well-managed and well taught group may never face the temptation to cheat. Although it may, indeed, be seriously questioned whether a pupil who has neither felt the need nor has found opportunities for copying, is apt to consider non-cheating a phase of honesty.

Insofar as attitudes are the products of habit established under the stimulation of the configural aspects of the situation, they may serve as determinants of conduct. But attitudes as emotional and feeling states may also serve as determiners of conduct for they form part and parcel of a habit. A state of pleasantness which accompanies a response does not evaporate after the consummatory act; it is recreated viscerally whenever the individual is confronted with the relevant stimulus. To say that the stimulus provokes the response and that synaptic readines dictates the speed of reaction, is to forget that the impulsive energy back of the original habits formed during infancy is as much affective as conative in complexion; that the feeling tones which had become incorporated in these responses have become attached to the derivative habits with equal pertinacity. Conduct is life and life is an admixture of feeling, willing and knowing. But feeling, willing, and knowing are but psychological abstractions: for the organism they are one and indivisible.

While attitudes considered as tendencies and emotional states may determine conduct, they cannot be erected into immediate educational objectives. A tendency does not spring full grown into consciousness. In its incipiency it is but a response or a series of responses with a distinctly contemporaneous flavor; the organism is only interested in their momentary significance. In conscious abstention from cheating, when the pupil is fully aware of the promotional value of copying, the responses are at first assessed according to the amount of approbation or self-respect they evoke. They become habitual when the cumulative effect of emotionally-toned repetition consolidates into a tendency. This explanation is equally valid in accounting for positive responses such as a tendency to like certain foods. Symonds is justified in stating that "A child cannot be taught to like vegetables; he can be taught to eat vegetables and then he will like them." We have already remarked upon the pedagogic impossibility of teaching likes involving reference to moral conduct. When predilection is recognized as a sentiment it is already implanted as a tendency; otherwise it simply does not exist.

But you can be taught to eat vegetables without liking or disliking them. What is meant by "taught?" If by taught is meant the continued unforced inclusion of vegetables in the child's diet, likes or dislikes will develop spontaneously. If it means the conscious influencing of choice, then likes and dislikes are stimulated from the very beginning of the teaching process. The configuration, hunger-vegetables-food-satisfyingness, results in a permanent tendency provided parents do not "emotionalize" vegetables. The moment they begin to explain why spinach should be eaten despite its vapid taste, a bias for or against sets in, depending upon the suggestibility of the child and the degree of insistency displayed by the parent. One cannot, then, be taught to eat vegetables to the end that he will subsequently like them. One can be afforded the unhampered opportunity to eat them in the hope that the state of satisfaction which accompanies the first sampling will grow into a tendency to welcome vegetables. The "teaching" is reserved against the time when vegetables show no tendency to become rooted as a habit.

Feelings and Emotions As Conditioners of Conduct: Although feelings and emotions as affective states do not directly initiate responses and therefore cannot be erected into educational objectives, it is generally admitted that they can be made to serve as conditioners of conduct. Behaviorists rightly assume that approbation and disapprobation applied immediately after a response is consummated, tend to repeat or inhibit that response whenever approval or disapproval are encountered. The statement, "Those caught copying will be severely punished," may act as a deterrent if it be made on the eve of an examination. This is a procedure psychologically different from that involved in the general injunction, "Don't copy!" issued at large and not directly related to a specific lapse. A general prohibition invested with emotionalism by threats of punishment is (1) meaningless without concrete embodiment, (2) empty without imaginative experience of the promised unpleasantness, and (3) apt to be resisted as an arbitrary exercise of authority. But emotional conditioning is not a consciously imposed process. It goes on continuously because the satisfyingness and annoyingness are part of every response. For responses are bathed in feelings. The simplest habit carries its own affective conditioner.

The psychological determinants of conduct become operative according to the following scheme:

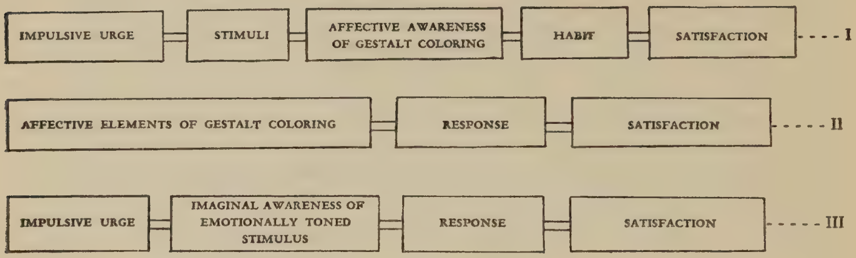
IMPULSIVE URGE
STIMULI
AFFECTIVE AWARENESS OF GESTALT COLORING
HABIT
SATISFACTION
I
AFFECTIVE ELEMENTS OF GESTALT COLORING
RESPONSE
SATISFACTION
II
IMPULSIVE URGE
IMAGINAL AWARENESS OF EMOTIONALLY TONED STIMULUS
RESPONSE
SATISFACTION
III

Figure 2.

Chapter III

RELATIONSHIPS IN MENTAL DISORDERS

THE NON-FREUDIAN VIEW OF DISORDERS OF PERSONALITY

The feeling, knowing, and willing self is constantly changing as a result of ever changing environment and desires. But no matter how ephemeral the event or the mood, adjustment must be complete and consistent if normality is to characterize the personality. In other words, while the individual is continuously developing, any one phase of it must be adequate to meet personal and social needs. These phases may be designated as lesser personalities slowly evolving towards a more efficient, stable, and fairly constant personality of adulthood. It sometimes happens that the juvenile self may continue to function alongside the adult self, or two selves of coördinate power may develop side by side, gaining successively the ascendancy over the individual. Other deviations may involve but one facet of the active personality; the affliction is not grave but it lends to the entire personality an abnormal tinge.

The two forms of aberration may be charged to many causative factors, physical and mental. Of the physical causes some may be (1) toxic, such as alcoholism, syphilis, serious disturbances in the gastro-intestinal canal, disease of the endocrine glands, opium, and chronic nephritis; (2) traumatic, direct injuries to the head, inflicted in accidents or war; (3) exhaustion (which by its nature is both physical and mental) following upon debilitating chronic diseases or the sudden loss of considerable blood; and (4) bodily diseases, other than those developing poisons or leading to the formation of lesions. Among these may be enumerated cardiac diseases, the reflex irritation from intestinal parasites (a prolific source of incorrigibility and waywardness) and the various nervous diseases such as epilepsy, chorea and hysteria.

The mental factor becomes prominent in maladjustment to one's environment manifesting itself in psychoses and neuroses. Sudden emotional shocks such as fright may induce an outbreak. Again, there may be a positive lack, such as dull sensitivity, poor memory, impoverishment of imagery, and feebleness of abstract reasoning.

The physically induced disorders may lead far afield into medicine. This is the province of psychiatry. It is best to confine oneself to the non-adaptive failures of personality, bearing in mind, however, that body and mind are indissolubly bound up together and that visceral and vaso-motor reactions accompany every mental state.

Definition of Terms: Before proceeding to the discussion of symptoms and diagnosis it may be well to define certain terms used rather loosely by psychologists.

(a) *Insufficiency and Perversion:* Mental disorders may be due either to insufficiency, perversion, or to both. Insufficiency is an arrest of development or complete paralysis of the psychic forces (using psychic in its psychological sense of conscious direction of mental and emotional forces). It may be congenital or acquired. When psychic paralysis is temporary and does not cause destruction, it is known as psychic inhibition. When it becomes permanently fixed it may lead to mental deterioration or dementia.

Perversion is that state of deviation from the normal in which the psychic forces are forced into unsocial channels.

(b) *Psychosis and Neurosis:* A psychosis is a mental disease induced by active pathological processes reacting upon mentality. While in the psychotic state mental symptoms are prominent, the causes are to be sought in bodily derangements. Conspicuous among psychoses are senile dementia, delirium tremens, paranoia and dementia praecox.

Neuroses and psychoneuroses are primarily disorders of the mentality irradiating into the emotional and motor mechanisms and often producing reflexly serious physical disturbances. The neurosis is essentially psychogenetic in its nature (it arises in the mind). In many neuroses (hysteria) both physical and mental causes are operative but there is a complete absence of a pathological condition of any part of the body.

In many mental diseases both psychosis and neurosis occur in conjunction. There are many psychopathic (psychoneurotic) individuals who exhibit well defined psychosis with psychopathic inferiority and whose psychic defect occurs in the volitional and emotional spheres. Manic-depression, paronoia, and dementia praecox belong in this group.

PROMINENT SYMPTOMS IN MENTAL DISORDERS

Classical psychology does not consider body and mind as distinct entities. It recognizes their close and continuous interdependence but assumes, for the sake of simplicity, a sort of modified duality. The mind is the central adjusting machine composed of smaller mechanisms operating in the field of cognition, volition and emotion. It envisages mind in terms of one dimension beginning in the sensorium (the sense organs) passing through the central nervous system (the intrapsychic) and terminating in the motorium (psycho-motor). An idea then passes by way of the psychosensory through the intrapsychic to the psychomotor. The intrapsychic includes the emotional and the whole arrangement is not unlike the stimulus-response formula.

Following this tripartite division of consciousness, psychiatrists classify symptoms according to the field in which they manifest themselves: (1) disorders of perception, (2) (a) disorders of thought, (b) disorders of emotions and (3) disorders of reaction.

The influence of psychoanalysts is tending more toward a functional classification of disordered behavior.

(1) Disorders of Perception: You know that the mechanism of perception has a sensory and a conscious phase; one sees with one's eyes and with one's memory. A strap is visualized as a piece of leather, or as a snake. In normal perception a sense of reality precludes the last mode of reaction. It is precisely this confusion of the real with the unreal that makes for disordered perception. It may take the form of an illusion or an hallucination. In an illusion consciousness misinterprets the sensations: a bad taste in the mouth may be perceived as poison. In hallucination consciousness contributes both the interpretation and the sensation. The hallucinatory individual may perceive a snake when nothing in the environment remotely suggests one.

Every sense may become the theatre of hallucinations. The person so affected may hear "voices," smell blood, feel animals crawling over the skin, or experience the organic sensation of broken bones, or the entire absence of the stomach. Hallucination may reflect a state of unreality in other aspects of environmental relations. It is known as disorientation — a state in which the individual forgets who he is, where he lives or the year of his birth. The maladjustment is spatial, temporal and personal.

(2) Disorders of the Intrapsychic Functions:

(*a*) *Disorders of thought.* Thinking may proceed along lines which diverge sharply from reality. Take our beliefs for example. A person may cleave to a belief which is opposed to fact: he may believe that Harold Bell Wright is the greatest American writer, or that Dempsey is the greatest living American. The attitude is not pathological because it is not delusional as in the belief that Dempsey is a God. A delusion differs from a belief (no matter how tenaciously adhered to or how falsely reasoned) in that (1) a delusion is untrue on the face of it; (2) it cannot be corrected by the most evidential appeal to reason; and (3) it is obviously incongruous with the individual's education and surroundings.

There are other instances in which ideas are over-valuated and receive from the individual a disproportionate amount of attention. We have such incongruities as fixed ideas, obsessions and phobias. The mediocre person who, having succeeded in selling a story, believes himself destined to become a great writer, has a fixed idea. If this belief comes to dominate the individual to the exclusion of all other normal interests, we say that the person is obsessed with the idea of authorship. If the same individual meets with repeated rebuffs he may become obsessed with doubts. Phobias (fears) are very specific and involve special subjects or conditions. Many children suffer from phobias due to emotional shocks, such as painful burns, horrible sights or severe punishment out of all proportion to the misdeed. Their abnormality consists in the essentially infantile reactions they engender. The otherwise normal child may behave abnormally to open spaces (agoraphobia), to closed spaces (claustrophobia) or to fire (pyrophobia).

Thinking might be subject to other forms of disorder. The train of thought may be shunted to side tracks or may become broken up. We meet this condition in confusional thinking in which the individual cannot conduct an initial thought to its logical or associated terminal but permits it to double upon itself, grow incoherent, turn sharply away in pursuit of chance inspired associations and wind up in a perfectly irrelevant idea. The train of thought might become overburdened by circumstantiality — a feeling common among uneducated. Or it may become slowed up (retardation) abnormally so that ideas come after prolonged silences — an impediment in which the patient "feels an inadequacy in dealing with mental problems." Psychologically these perversions may be explained as derangements of both attention and associations. The guiding idea is not definitely fixated so that any idea that happens to be present in consciousness merges with it and produces a mechanical synthesis without logic or aim.

Rosanoff cites an illuminating case. "A manic patient was asked to tell about the death of his mother, which incidentally, was the cause of his illness. He began: 'The poor woman came home from work in the evening. She was taken with a chill. . . .' One of the assistants picks up a pencil from the table in front of the patient. 'Hold on! there is a pencil, a blue pencil. . . . Can you draw?' Another assistant begins to cough. 'If you have a cough you should take Gerandel's tablets. . . . You know, spitting on the floor is prohibited. . . . That's a fact.' . . . Noticing a small rent in the vest of an assistant: 'I guess you have no wife to do your mending!' "

Another form of disordered consciousness is evidenced by derangements of memory. Memory depends upon fixation, retention, and recall. Each of these phases may become affected. Fixation follows perception; therefore confusional thinking is traceable to a defect in fixing ideas. Where retention and recall function poorly we get the condition of forgetfulness known as retrograde amnesia. The patient may forget everything prior to the onset of the disease. This condition is conspicuous in certain types of dementia.

Again, recall may be blocked. This is symptomatic of manic depression or toxic psychosis.

(b) *Disorders of Emotion:* The emotional reactions may become involved, becoming perverted to the verge of morbidity. We may encounter five common forms of disordered affectivity:

(a) Morbid indifference
(b) Exaggerated emotionalism
(c) Morbid depression
(d) Morbid anger
(e) Morbid joy

Among psychotics and neurotics we find individuals whose emotional reactions are out of all proportion to the cause. They laugh boisterously, espouse intense sentiments, show extreme sorrow, violent resentment during situations that would evoke in the normal individual smiling indifference or tepid feeling. Morbid anger is but an accentuated exaggeration, and a person subjected to such outbursts becomes "beside himself" or more euphemistically, "forgets himself." These cases are found in many classrooms especially in the ungraded classes. When the expression of acute emotionalism becomes violent, the school, of course, cannot harbor them.

(3) Disorders of Reaction: Reactivity with or without stress is the normal condition of the nervous system. Every impulse tends to find some form of expression. It may not be overt but it seeks to produce some change in the organism. However, the environment may force the inhibition of a response or consciousness may appraise conflicting responses and throw its weight in the scale against one or the other. Since the act of deciding is painful, conflicts may lead to the forcible suppression of the unsuccessful competitor. Now, in abnormal individuals, the suppression may become general: all reaction is paralyzed. Or the repressed impulse may become rerouted through the automatic channels so that reaction takes place through the unconscious. The former state is known as aboulia or paralysis of voluntary action; the latter, automatic reactions. In aboulia the voluntary apparatus becomes sluggish "and resembles a rusty mechanism which works only with difficulty."

Automatic reactions are either positive or negative. Those whose reactions are positive act like automatons, become highly suggestible, repeating the words or gestures of their associates. Many criminals come from this class. Another form of this disorder is known as stereotypy. There is stereotypy of attitudes, stereotypy of movements and stereotypy of language. Some defectives react in this way.

Negative automatism or the negativistic attitude consists in reacting in a manner diametrically opposed to the response normally called out. There seems to be present some sort of psychic interference which blocks the appropriate reactions and diverts it into an antagonistic channel. It differs from aboulia in that the patient is active: he strives to bring about the perversion. When asked to open his eyes wide he shuts them tight.

CHAPTER IV

GESTALT PSYCHOLOGY

FUNDAMENTAL CONCEPTS OF THE "GESTALT" SCHOOL OF PSYCHOLOGY

WHEN psychology became conscious of consciousness it attempted to investigate its true inwardness. The sensationists and associationists envisaged consciousness as a synthesis of ideas and sensations which coalesced to form higher mental states. For a long time the process was conceived as being purely additive, a piecing together of psychic atoms. This explanation was found to be inadequate for it left a residue of phenomena that did not fall entirely within the mechanistic concept. There were, for example, evidences of "non-sensory" psychological phenomena which were not referable to primary sensations. Mental life also consisted of "acts" in which the self operated as a totality, and not merely as a spectator in a play enacted on the stage of consciousness by ideas and sensations.

The search for this active psychological factor was recognized by Aristotle when he postulated a "soul." It was endowed with operating and forming principles which guided mental operations. This Aristotelian Vitalism is also known as "entelechy." Aristotle's successors first accepted it blindly, then attempted to give it a scientific orientation by refining it in the alembic of experimentation. The experimenters found supportive evidence in the conclusions of Woodworth, Bühler and Orth. Woodworth assumed a "feeling of relations" in space perception; Bühler distinguished "factors" of intention and consciousness of causality organizing visual images; Orth postulates conscious attitudes at work behind sensory states. Ach went a step farther in his experimental studies of will. His findings disproved the associationists' contention that there is no consciousness of will prior to action. His studies led him to assert that there is a consciousness of will in the form of "determining tendencies" which governed action. He based his conclusions on experiments in which subjects were asked to memorize nonsense syllables. In the course of the experiments he introduced obstacles such as demanding a change in the order in which they had been memorized. Only the exertion of willpower (determining tendencies) could weaken the associative element which formed the essence of sensory psychology.

Thus the venerable laws of association by similarities gave way to a teleological factor, the assumption of the presence of design in consciousness. The Gestaltist broadened the concept by including the notion of totality. Gestalt is a category of thought like causality and function. It concentrated on two problems: (1) The relationship subsisting between a whole and its parts. (2) The problem of adaptedness of certain structures and types of behavior.

The first step to their solution was made by Charles von Ehrenfels who pointed out that a melody remained the same even when transposed in a different octave or in a different key. This analysis led him to postulate a *Gestaltqualität*. It was something added to the raw sensory material which was over and above the component sensory elements. A group of psychologists at the University of Gratz studied sensory data as unit wholes and discovered that many possessed Gestalt quality. This led them to develop the theory that consciousness operates on sensory material in two ways: (1) The mind reacts to sensory data in a mechanistic fashion, registering a mosaic of different sense impressions. For example, in visual perception, sensations are thrown upon the retina in a pattern corresponding to the geometrical appearance of the object. (2) This mosaic is manipulated by an extra-sensory creative factor which moulds it into units and wholes. This factor displays vitalistic properties.

But it is vitalism of a different order from the "soul" of Aristotle. It is a scientific vitalism deriving from the laws of physics. Physics rejects the notions that law and order can be explained on theory of pre-existing machines and that supernatural forces effect a transition from one state to another. Rather does it postulate that order arises from the "spontaneous self-distribution of process" by which form and order arise from "specific properties of substances and processes in relation." This "self-distribution of process" forms functional wholes.

The same process operates in mental activity and helps to explain the phenomenon of *Gestaltqualitäten.* The physical environment affects the sense organs; the resulting sense impressions are dynamically organized within the organism into distributions. These organizations are usually subjected to stresses and are eased by a form of energy within the distribution. There is no end to the number of organizations of the sensory data but the organization of these data depends upon the relation between the particular wholes and the wholes that surround them or form the field. These relations are closedness, articulation and consistency of the particular wholes. In the Gestalt theory, these conditions are summarized in the law of Prögnanz.

THE GESTALTIST VIEWS THE HUMAN MIND

The Gestalt school of psychology protests vigorously against the exclusively neurological explanation of the learning process. A physiological explanation of cognition does not satisfy the Gestaltists. They have gathered an imposing array of experimental data to disprove the validity of the S-R (stimulus-response) formula, according to which any object in the sensory field, like a pencil, is transmitted through the nervous system by way of the retina, optic nerve, and the area striata of the brain just as a photograph is conveyed by wireless. If one could see the retinal image one would find a mass of dots correponding in geometrical form to the pencil. These sensory residua form a "trace" in the brain tissue, the memory of the pencil, which can be revived or reproduced by outer or inner stimulation. The outer "cue" might be the original pencil, other pencils or the word "pencil." The same word evoked by an act of will constitutes the inner "cue." The neural traceries of the physical and verbal stimulus, "pencil," had become linked up by association. In the course of time other links are added. There are memories of the uses a pencil can be put to, impress of the sound "pencil," and the sensations of the manifold varieties of lead and color. These secondary accretions infuse meaning into the sensory mosaic and equip it with so many associative handles by which it may be dragged out into the consciousness. In addition to facilitating accessibility, meaning rectifies subsequent deviations in the form and texture of the "cues." If in the initiatory stimulus, the pencil and its neural counterpart appeared in a horizontal position, the mind will continue to recognize the pencil regardless of its new position or angle. This constancy holds for changes in color, shape or material. The neurones store away the traces that impinge upon their sensitive surfaces; experience reshapes them in accordance with their unchanging essence, or their "real" appearance.

As here used, "real" bears no philosophic connotation. It is not opposed to the "unreal" but to the "true," the result of naïve observation. It is synonymous with the sophisticated modification of the perspective variations that an object undergoes in the retinal field. A plate may register on the retina as a full circle or as a flattened ellipse. To the eye a man's height varies with distance; a screened figure when viewed from the extreme right or left section of a theatre appears disconcertingly distorted. Yet the observer discounts the phenomenon of foreshortening or distortion by an act of *à priori* reasoning arrived at through introspection.

The Gestaltists take exception to the nativistic theory which postulates a mechanistic order of conduction from stimuli in the sensory field to the responding organs and to the empiristic or "meaning" theory which accounts for organization of their "traces" into meaningful wholes. On the nativistic theory the acquisition of a skill, like writing, for example, depends upon the impact of stimulation upon the nervous system involving the collaboration of eye, brain and fore-arm with their inter-connecting nerve cells. The physiological and neurological topography is fixed at birth. The act of writing becomes highly automatized with practice and a person's signature may be said to write itself. Yet, without previous practice, one can produce a good likeness of one's signature by writing with the left hand or by tracing it with one's toe. Neither the left hand nor the toe had ever been linked up with the writing mechanism. The nativistic theory falls down in this test.

The meaning theory fares no better. Take one of the famous paradoxes, the optical illusions, mentioned by Helmholtz in his *Physiologische Optik.* Place a desk near a window and parallel to it fasten a vertical screen. A black paper is placed on the window side of the desk, a white paper in the shadow of the screen. They must be so arranged that both papers reflect the same amount of illumination. Therefore, the images projected upon the retina of the observer are equally intense. So are the sensations, "brightness," the same. Lest it be thought that the surroundings produce this quality, the papers may be viewed through two holes in a cardboard so arranged as to exclude the brightening window and the obscuring screen. The same "constancy of brightness" is observable. The observer readily discriminates between the white and the black. The meaning theory successfully withstands this challenge because by eliminating the background one gets a true sensory experience; the apparently dark "white" paper and the apparently white "black" paper in the unmodified vision are conceived as "seeming" and "irregular" variations from their normal states. The "seen" color and the "retinal" brightness are distinguished through the infusion of experiential "meaning."

If this supposition is correct, a demonstrable lack of opportunity to acquire such meaning should militate against the ability to purify "true" experience of its adventitious ingredients. For in order to learn that white is sometimes black and black is white requires a great deal of experience. But Köhler and Beryl, experimenting on two-year-olds and on chicks and young apes have found that they possess approximately as good a "constancy of brightness" as sophis--ticated adults. They never mistake the "white" paper or the "black" paper under the most rigid experimental conditions. The "meaning" theory failed to operate.

These considerations have prompted the Gestaltists to discard these theories and to advance the claims of the dynamic concept. They go to the physical sciences for corroborative facts. They instance the phenomenon of a drop of water moving through a narrow pipe. Why does it move? Mainly because pressure is higher on one side of it than on the other. It moves in one direction only because the confining pipe excludes other effects of the pressure. It is relatively static. Remove the pipe and let the column of water merge into a larger body of water. The drop of water will now move in the direction of the resultant vector of force. Interaction of forces at every momentary stage of its advance will condition its progress, *i. e.*, the path will be determined dynamically.

Analogically, sensory experience of the visual type depends upon the interaction of the stimuli emanating from the seen object and organized in the region of the area striata into a dynamic structure. What the mind sees is not a geometrical figure, nor a mosaic of dots conducted along pre-determined physiological paths, but a picture or Gestalt of the sensory field. Though its point of reference is the optical part of the nervous system, it is not topographically localized there as a physical tracery. The picture, pattern, or configuration or Gestalt is as unattached as an idea; a suitable stimulus causes it to leap into consciousness as an integrated whole rather than built up slowly as a consecutive summation of the relevant traces.

The process of merging stimuli patternwise is best illustrated in the perception of musical notes. The mind becomes aware of a chord in simultaneous organization of the component notes. It is the totality of the sounds that cause them to be recognized as such. The moment one attends to the individual notes, the melodic effect is destroyed. Therefore one cannot postulate an additive process of perception. True, receptivity is conditioned by the auditory neural mechanisms; conduction is determined by innate neural channels, just as the progress of the drop of water is conditioned by the restraining pipe. But the effect of the stimulation is not geometrically organized. It is fused into a pattern or picture. The mind cements its essential elements into a harmonious entity. Hence the ease with which a melody, once pictorially organized, can be recognized when played or sung in different keys.

The patterning of sensory experience is not exclusively a mental property. According to the Gestaltists, perception is facilitated by the organization of the sensory field. When one attends to nonsense syllables, like *ig, sog, lon, rin,* one finds it difficult to memorize them because the mind is hard put to it to find an organizing principle that would arrange them into a constellation or pattern. But in distributions like the following, patterns emerge with greater ease. Lines drawn in this wise:

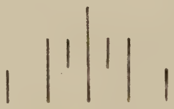

Figure 3.

are readily reproduced. So is this constellation:

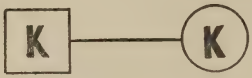

Figure 4.

Here the letter K is abstracted from its environment because the K's with their circumscribed square and circle have been apprehended as a complete picture with its dominating foreground and subordinated background. Any disturbance in the relation of the sub-units as:

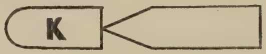

Figure 5.

produces a new configuration and the K becomes submerged in its background. For it is the total sensory field or total situation and not the segregated component units that the mind perceives.

CONFIGURAL LEARNING*

Köhler's experiments designed to ascertain the learning processes of anthropoid apes resulted in the formulation of the sequences obtaining in configural learning. Köhler placed the apes in individual cages. Food was placed within but out of reach of the occupants. However, "tools," such as sticks and boxes, were introduced. The apes reacted to them by random manipulation characteristic of that phase of trial-and-error orientation known as "chance" learning. This was followed by a period of quiescence, a pause for taking stock of the situation, followed after a short interval, by a direct attack in which the stick was grasped purposefully and the food knocked down. The same directness was employed in seizing a box, mounting it, and seizing the food. The entire sequence embraced the following steps:

1. The goal, in this case the seizure of food, was kept steadily in view.
2. The objective elements in the field of vision were neither manipulated blindly nor were they regarded as arbitrary objects, the preliminary random handling of them notwithstanding.
3. During the cessation of random handling of the objects, ascribable in greater part to the eagerness evinced in compassing the end, the behavior of the animal was motivated by the exercise of insight, the awareness of the interrelationship subsisting between the intervening objects and the goal. Understanding, it would seem, preceded the successful behavior.

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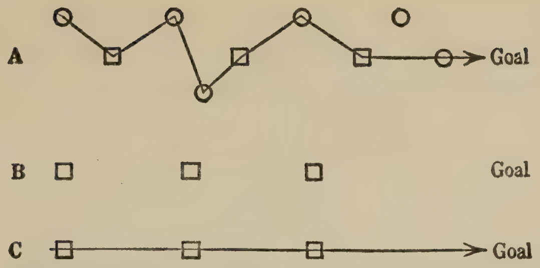
* Quoted by permission of the Macmillan Company from *Testing Intelligence and Achievement,* by Levine and Marks.

4. Insight operated to aid the animal in envisaging the discrete elements of the situation as members of a total situation; as the Gestaltists have it, as members of a coherent, sequential configuration.
5. This flash of insight was followed by achievement, the reaching of the goal through a continuous curve of progress extending from the point of departure to the consummation of the movement-complex.
6. The successful mode of behavior was fixed at the moment of achievement and, unlike the trial-and-error learning, did not exhibit, upon repetition, as large a curve of errors.

A true solution of a behavior problem proceeds as follows:

1. A highly transitory period of trial-and-errors behavior initiates the learning process.
2. The goal-seeking proclivity asserts itself in the calm contemplation of the sensory field.
3. By the aid of insight the disconnected stimuli are apprehended as members of a pattern or configuration. Only those stimuli are accorded membership in the configuration which impart meaning to the movement-complex.
4. The elements of configuration become, then, as durably fused as notes in a melody, so that a moderate repetition tends to preserve the alignment.
5. Employing the symbols ○ and □ to represent repectively unsuccessful and successful movements, or the handling of right objects, the true solution may be shown thus:



A. Random Handling of Objects, without attainment of Goal.
B. Alignment of Objects or contemplation of movements.
C. The Stage of achievement.

Figure 6.

6. According to the Gestaltists, configural learning marks a stage of original acquisition in that the organism does not evolve the newly acquired behavior from innate dispositions brought to the focus of consciousness by the perception of the sensory elements of the new situation. The fruit and the stick in Köhler's experiments are not brought together because, as Bühler maintains, "an arboreal animal must be quite familiar with the connection of a branch and fruit," and therefore the conjuncture of a "branchless fruit" and a "fruitless branch" (the stick) leads it, "to incorporate the two, so to speak, in one idea." Rather the complex stick-tool-fruit is a totally new configuration arising less from an instinctive and ideational (memory of branch plus fruit) matrix than from a sudden awareness of the true inwardness of the situation.

CONTRAST BETWEEN THE GESTALTIST AND NEUROLOGICAL VIEW OF THE LEARNING PROCESS

In its broadest sense, learning is the process by which the mind acquires experience and knowledge in the form of habits or ideas. In the formation of habits the end result is motor, in the acquisition of ideas it is ideational. For the neurological or classical psychologists, learning is predominantly mechanical and obeys certain laws: the laws of readiness, practice and effect. The law of *readiness* has reference to the easy accessibility of the stimuli to the appropriate sense organs and neural channels. It has physiological and psychological aspects. In learning how to read, say the word "frightened," the eye must be directed to the stimulus word and the teacher must minimize fatiguibility to the end that the conducting nerves maintain a healthy tone. The child must be ready physiologically. But the eye may be fixated properly while the mind is wandering. Therefore a minimum amount of attentiveness must be secured. The teacher provokes learning in attention by exhortation or persuaion or ingratiation. This is psychological readiness.

The law of *practice* has regard to the deepening of the neural channels, and the multiplication of associative bonds so that recall may be facilitated. Repetition is another name for it. The law of practice is deemed the foundational one because persistent practice may result in successful learning even when attentiveness is indifferently exercised. By dint of forced protracted repetition the mind is compelled to take cognizance of the importuning stimulus.

It can even ignore the benevolent aspect of the law of *effect,* the pleasantness which a successful response engenders. The child who learns a new word dilates with the emotion of self-approbation. As a consequence the entire learning experience becomes suffused with feeling, thereby enhancing neural sensitivity and deepening the sensory traces. Of course distasteful repetition provokes the feeling of unpleasantness or annoyance, the malevolent aspect of the law of effect. But it is not considered as efficacious as pleasantness and is only resorted to when the response is unsatisfactory, as when the child refuses to attend. A diagramatic representation of the classical view of learning is subjoined.

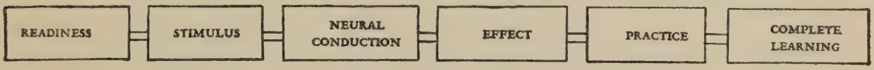


Figure 7.

This diagram may be considerably abridged in the light of the primacy of the law of practice into

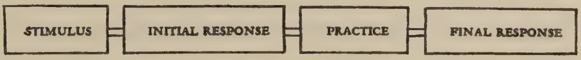


Figure 8.

or S-R for short.

In the acquisition of more elaborate material, an historical fact, the S-R formula and the three laws on which it is based are deemed sufficiently explanatory of the learning technique. It is considered just as valid in habit formation, whether of a single habit or a chain of habits. Take the "school going" habit, that complicated procedure of setting out for school. Reducing it to the essential stages, it involves (1) the temporal stimulus, the time, (2) the visual stimulus, the books, (3) the packing of the books, (4) the departure, (5) the determination of the most expeditious route, (6) routine involved in finding the line, (7) marching up to the room, (8) undressing, (9) reaching one's seat, and (10) preparing for the recitation. For the classical psychologist, "school going" is enchannelled in the nervous system by a summative process of unitary responses, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10, accelerated by invoking the laws of readiness, practice and effect. The aim is to automatize it. The same considerations hold for habits possessing moral significance, *e.g.*, thrift or the money saving habit. Here also readiness and effect merge to form the emotional tide upon which the habit is launched; repetition determines its future course.

The Gestaltist concedes the potency of the law of readiness or mind set. For him, it is an exemplification of a law of dynamics. The mind, organized as it is as a system of potentials of descending stresses, resolves them in the direction of the area of lowest pressure. The process of learning from stimulus to response presupposes such a structuralization of neural impulses. When a given nerve cell or a congeries of nerve cells is stimulated, there follows a release of energy, just as the throwing of a switch will cause the current to travel between the ends of the wire. The current flows because there exists a difference of potential in its electrical field. The neurologist calls the point of highest potential "mind set" and "readiness," the Gestaltist, "will to learn" and "insight."

The law of practice is not received as favorably. Whether a child learns that 3 × 5 = 15 depends upon the organization of two major parts of a system of energy: the growth potential or maturation and the stimulus-situation, or the stimulus pattern. Maturation means the enlargement of personality conditioned by inner and outer dynamic compulsions. The stimulus-pattern or environment sets up stresses which become aligned with the maturation impulse. Learning or experience ensues when tensions are resolved. In the course of resolution the will-to-learn and insight relates the details of the given situation, produce an integration in the form of a higher level of maturation. Learning is encompassed as an instantaneous reaction. As long as the relations involved in the stimulus-situation are not too complicated for the learner's given maturation level, learning is bound to eventuate. In this type of learning, permanency of retention is attained in terms of the relative fixity of the level of maturation, which in turn is a function of the interaction between the growth potential and the stimulus-pattern. This is not repetition in the sense used by the neurological psychology. For here there is not welding of related stimuli by the force of association but the organization of a field into an organismic configuration.

The Gestaltist is no less inhospitable to the law of effect. The assumption basic to this conception is that learning is enhanced by the feelings of pleasure and annoyance. Motivation easily degenerates into application of rewards and punishments. These act as facilitating influences. First, the Gestaltist objects, learning takes place with respect to some goal. Learning that leads to its attainment is evaluated as to helpfulness or harmfulness of that experience. This decision is made through insight and is antecedent to the act of learning. The feeling of pleasure or unpleasure arises when the learning act has been completed. The stimulus-situation reacts upon the mind to produce a personality adjustment; then feeling supervenes. Pleasure and annoyance are by-products. The individual is pleasurably excited because he learns; he does not learn because he experiences these feelings.

Second, man is not actuated by the Pleasure Principle. As a system of energies he seeks to so order his life as to maintain a state of quiescence free from the disturbances of disequilibration. Potentials are constantly being set up and released by an ever changing environment impinging upon his consciousness. He is forever questing for remote ends in the pursuit of which he discovers pleasure and unpleasure.

Third, rewards and punishments are apt to be ulterior. They do not lead directly to the goal but resort to indirection and obliqueness. They set up secondary ends which tend to obscure the situation. "Stars," marks, bribes, detention and deprivation of privileges retard the process of maturation and detract from the potency of ideals. They replace the legitimate ends of self-expression with the spurious goals of self-deceit. All that is needed for the consummation of an act of learning is the presence of tasks whose performance satisfies the demands of the given level of maturation.

TYPES OF LEARNING

The classical psychologist recognizes two main types: learning by association and learning by contrast. When *A* and *B* occur together, *A* will recall *B* and vice versa. Black is best recalled when it is conjoined with white. What holds them together is mere neural proximity: the "traces" form a physical union and as a consequence either one is capable of reviving the other. The Gestaltist discusses four types of learning: (1) Learning by artificial configuration, (2) Learning by natural configuration, (3) Learning by gradation, (4) Learning by definition.

Learning by artificial configuration is the type of learning in which sensory organization is lacking. Nonsense syllables are learned in this way. The mind struggles with these recalcitrant elements until they are forced to form an unnatural union or until ingenuity contrives to place them in a configurative frame. It is akin to the associative learning of the classical psychology. This is the only sphere in which the three laws of learning are supreme.

Learning by natural configuration involves the seeking out of salient patterns in the sensory field. Its chief virtue resides in the curtailment of the practice curve. With the emergence of the pattern the learning act may be said to have been consummated. It is not complete or permanent learning. But the number of fixating repetitions are far less than that required in non-configurative learning. Just as in problem solving, once the solution is discovered it can be worked again with extreme rapidity, so in configurative learning, once the component elements are constellated, the pattern springs into focus with instantaneous speed. Only a few repetitions serve to fixate it in the mind.

Learning by gradation and learning by definition are but variants of configurative learning. The former is exemplified in learning synonyms. "Continuous" and "continual," for example, are envisaged as maintaining a gradient to each other, as related to each other as are shades of color. Here the configuration is not a discrete whole but a union of segregated wholes held together by less tangible but none the less uniting bonds. The latter is a more highly autonomous process working independently of the sensory material. Its purpose is to combine elements common to two or more configurations into super-configurations possessing conceptual powers. It functions best in the moral sphere where concepts such as honesty must be created out of acts involving honesty behavior. The elements common to all honesty situations are abstracted and recombined into an ideal of honesty. The classical psychology builds this concept out of emotionalized thinking from which honesty as behavior is supposed to issue. The Gestaltist begins with behavior configurations in which the manifold manifestations of honesty are organized into discrete patterns. This is followed by the culminating stage, the ideal, into whose texture the underlying and fundamental attitudes and deeds are interwoven. The configurative ideal has a far greater potency because it is informed not only by thinking and feeling but by doing.

THE GESTALTIST LOOKS AT HUMAN NATURE

Gestaltism arose as a protest against the mechanism and materialism of the traditional and behavioristic psychology and is tending towards an organismic or cosmic interpretation of human behavior. By organismic or cosmic is meant a conception of human nature as based on the same physical laws that are operative in the physical sciences. The mind is a system of energy. It is akin to the gravitational system. Its kinship is functional; *i. e.*, its manifestations are explicable in the same terms. It differs in form or appearance; it is phenomenologically different. Functionally, gravitational and physical systems are energy units. The energy derives from force implanted in nature. The apple is drawn to the centre of the earth for the same reason that the mind reacts upon the environment: the dictates of the laws of dynamics.

There are seven laws of dynamics:

1. *The Law of Field Properties.* Any descriptive units of science, like water, possess properties that accrue to the entire field over and above those that are intrinsic in its component units. Oxygen and hydrogen are constituent elements of water; yet it is something more than either one. It is more than a summation of the qualities of each. It is an integration in which the parts are organized into a whole so closely knit together that individual characteristics are transmuted into new qualities. One cannot speak of it as an integration of parts for these lose their identity at the moment of fusion: oxygen ceases to be oxygen when it reacts with hydrogen. What becomes integrated is the whole. The parts become parts-in-relation, with subordinated membership character in a newly created field of properties.

The relationship of the parts takes on the quality of a gradient. In the single-celled organism the highest rate of living is at the surface and the lowest in the centre. The more complex organisms have two important gradients: one in the nervous tissue extending from head to tail and the other in the muscular tissue whose greatest vitality is at the tail.

The converse of the law of field properties serves to explain the added significance that accrues to membership in a whole. Although members lose their identity, the whole confers upon them a new status whose attributes are derived from the relationship and dependence obtaining among them and whose activity is motivated by the unit as a whole. A stone acquires the property of weight when it enters a gravitational system. The activation of the thyroid gland depends upon its chemical balance with the rest of the body. The organization of a field of electric energy imparts potentiality to a given charge; the varied potential of other parts of the field, characterized as high or low, dictates the direction and extent of discharge.

(2) *The Law of Conditioned Action.* The movement of the bodies in any gravitational system is conditioned by the system as a whole. Each element is but partially autonomous; its motive power is the force exerted by the entire gravitational field. The living organism obeys the same law. It determines how each and every organ shall appear. Causation operates in all bodily growth. Each system of energy controls and guides its own unit memberships while at the same time responsive to the influences exerted by larger systems. This is but another way of saying that independent systems, organized as self-contained units, act in a unitary manner regardless of the specialized nature of their subunits.

(3) *The Law of Differentiation.* Life and energy systems have their genesis in undifferentiated cells and entities. Growth is sustained through differentiation of parts of their structure into specialized organs or sub-systems,

each one taking on an individual form without ever surrendering its membership status. The development of the embryo exemplifies the working of this law. The various organs of the body, the neural conduction paths and nerve centres — all emerge from unspecialized cells. Viewing the embryo as a field of force or physiological field or ground, these specialized organs and mechanisms are local figures or patterns emerging through differentiation.

(4) *The Law of Unitary Evolution.* Differentiation is not an additive process. Cells do not merely multiply, nor do parts merely expand. The same is true of structural modifications in the physical world. Growth is not by synthesis. The whole is primary. It effects a change in its field so that part of the energy becomes particularized as to structure while functionally it retains all attributes of the original pattern. The change proceeds from relative homogeneity to independent heterogeneity. In the cell, there occurs a differentiation of the protoplasm into highly specialized organs and mechanisms. But the protoplasm furnishes the basic pattern.

(5) *The Law of Least Action.* Energy moves from one part of the system to another over the shortest route. The direction of the movement is also conditioned by the system. So is the starting point and the termination of the movement. The starting point is fixed where a given amount of potential energy is released into kinetic energy. The direction of the movement is given by the alignment of strains and stresses; the termination is the point at which the stresses and strains are resolved. The apple on the tree is orientated towards the centre of the earth. This is its theoretical terminus, this is its major goal. When it falls, it does so in the direction of the stress exerted by the centre of the earth. Its fall is initiated by the disturbance of the balance of forces within the gravitational system.

The cycle completed by the apple is conditioned by the disequilibration of stresses. While it is hanging on a branch it is balanced against gravitational pull. It has, therefore, a given amount of potential energy. The potential energy changes into kinetic when the stem breaks. At the moment of the initiation of the fall it already possesses directional orientation, a remote end. Every position successively occupied by the falling apple is preordained by the totality of the gravitational field. When the movement is completed the stress is resolved because the apple has traversed a distance along a path of diminishing stress to a point of relatively little stress, the earth. The strain had been resolved; the movement had proceeded in accordance with the Law of Least Action.

(6) *The Law of Maximum Work.* When a system of energy is in equilibrium, its maximum energy is distributed or stored within the field. It is then called potential energy. When the balance is disturbed all the energy is converted into kinetic energy and is exerted maximally to restore the balance. To balance the trays of a scale, as much weight must be placed on one as on the other. When a nerve is stimulated the impulse expends itself to the full, no matter how feeble the stimulus, with all the energy made available by the entire organism.

This law of reaction is in evidence in that type of disequilibration in which the integrity of the organism or system is threatened with impairment or destruction. All regenerative effort following upon injury and all recuperative activities resulting from fatigue engage the maximum energy of the organism. Such concentrated mobilization of protective forces takes place in emotional disturbances and in situations involving the thwarting of instincts.

7. *The Law of Reciprocal Unitary Reaction.* The whole integrates its elements into a harmonious and com-

plete system. Each unit-member retains some autonomy in the exercise of its differentiated and specialized function but always in accordance with the impulses emanating from the whole. When two systems interact, they do so as units or configurations even though at the points of contact only discrete elements are affected. When a stone is thrown at a window two systems of energy becomes involved; the field of energy behind the stone and the alignment of strains and stresses behind the window.

The field of energy behind each system may be termed the total situation. If one acts as a disturber of the balance of the other it becomes the stimulus. But stimulation is not effected by the impinging unit but by the total set of conditions which set the unit in motion. When applied to human behavior the law means that any reaction to environmental forces or to inner stimulation brings into play the organism-as-a-whole and the situation-as-a-whole.

Summary: The Gestaltists envisage all of nature within a framework laid down by the "Cosmic Plan." The cosmic energy is organized into systems of varying complexity. They differ as to form. There are atoms and chemical compounds, neurons and nervous systems; the physicist recognizes electricity, heat, sound, light, and gravitational systems; the biologist, muscle, nerve and organism; while the psychologist deals with ideas, feelings, will and self.

The systems are organized into patterned wholes, integrated into self-acting units, and larger and more comprehensive wholes, whose relations are dynamic to each other and to the inclusive smaller sub-units. When so structured, they constitute fields, patterns, alignments of stresses and strains and configurations. The fields possess certain properties which, while growing out of the properties attributed to the component parts, are yet totally different from them. These differences arise in the course of maturation in the biological realm and organization in the physical realm. The cell grows into an organism and the electron becomes structurized into electricity.

Each system of energy is in constant alternation between quiescence and activity, balance and disequilibration. This condition is due to the alignment of stresses and strains in which the energy potential is distributed in areas varying in pressure. The area of greatest pressure possesses high potential, the one of lowest pressure, low potential. When thus aligned, the system is in equilibrium. But it does not remain in balance for long. Energy released by interaction with another system, or by minor stimulation, becomes kinetic energy. The strain exerted by the gravitational system proves too great for the apple. A state of disequilibration ensues. The apple falls until stopped by the earth.

The condition of imbalance demands a resolution of the strain. It is resolved in a predetermined way obedient to certain dynamic laws. The law of field properties prescribes the mode of behavior of the implicated forces. The apple moves in accordance with the properties inherent in the whole field. Through the law of conditioned action, the whole enforces its will upon the activated unit. The law of differentiation imparts to it its specialized character, its unit-wholeness. The stress is resolved in the quickest way (the law of direct action), by the structurization of the whole; and that way is in the direction of an end, a goal set by the exigencies of the system. The law of maximum work safeguards the system against assaults upon its integrity, and when the process of adjustment is initiated, it proceeds in accordance with the law of reciprocal unitary action. It enforces the mandates of the system not upon the intruding stimulus, but upon the total situation.

This dynamic conception of nature offers the Gestaltist a universal principle of "objective functionalism." Nature operates through but one set of laws, the laws of dynamics. Energy is mind and mind is energy. There is no need for a vitalistic, spiritualistic or idealistic explanation of human behavior. Will, purposiveness, insight and conscience are properties of energy as characteristic of the human being as of the atom. Mind is organized into thought, electricity, iron, proteins and organisms. It informs myriads of phenomena. It assumes multitudinous forms. But at the basis of all forms lies one force, mind in a dynamic sense.

THE GESTALTIST STUDIES PERSONALITY

It is characteristic of the Gestaltist psychology that it does not analyze character out of human behavior and set it up as a distinct developmental unit. Character and personality is one unresolvable mode of behavior which emerges as a result of the continuous reaction of the growth potential provided by the heredity pattern and the ever changing environment. Heredity and environment constitute a pattern, in which heredity is the ground upon which environmental forces become figured. Dynamically, it is a system of energy ever striving to maintain a state of balance between forces of individuality and those of the material and social environment.

Structurally, the personality organization, or to use the Gestaltist term, the personality configuration, is a system of aligned strains and stresses with a differential of potential between the areas of relatively high stress and those of relatively low stress. It develops field properties analogous to those in a gravitational system. Between the illustrative apple and the centre of the earth there exists a definite relation shared by other objects in the gravitational field. As regards the apple, the gravitational field is its environment. The repercussions of each upon the other differ but in complexity and in form. Each displays a state of "awareness" of the other. In the human organism these are feelings, recognitions, and volitions.

These modes of reaction manifest themselves in the process of adjustment, a process directed towards the resolution of strains and stresses that upset the balance between the individual and society. The causes of disequilibration are many. The individual is determined to pursue his own ends, to maintain them, and to resist all attempts at dictation and intrusion. As a system of energy he exerts his will toward the preservation of the integrity of the self. But nature has decreed that "human nature decays in isolation"; that the individual must become subservient to the group if he is to survive; he must become an intimate part of a larger whole. Hence the constant preoccupation with the strains and stresses engendered by the exigencies of cooperative living.

THE LAWS OF PERSONALITY GROWTH

Law 1. Since man cannot refuse membership in society, he must subordinate himself to the group. In this decision he is following the universal law of dynamics, the Law of Field Properties. Society, then, becomes a field of personalities imposing the collective will upon the individual. That will is embodied in the human-nature-pattern. The field of properties of this pattern are customs, public opinion, morality, culture, and language. The individual must conform to these insofar as his growth potential, native endowment, permits. Such conformity, however, brings about modifications of individual behavior in terms of social behavior.

Law 2. The individual and society form one system of energy, one integrated whole. As he develops he acquires a human nature just as the apple acquires a gravitational nature. The course of development is conditioned by the containing and directing whole — society or the gravitational system. The activities of the individual are conditioned by the social system. Any mode of behavior, such as beliefs, ideas and ideals and habits, are deeply colored by the environmental forces. From infancy the child is profoundly influenced by the attitudes, habits and whims of his parents. He comes into the world with an "undifferentiated growth potential," a field of properties conferred by heredity. The environment immediately closes in upon him and proceeds to articulate his life with that of society. It forces him into group membership by imposing its human-nature-pattern upon him. He submits to its influence in accordance with the Law of Conditioned Action.

Law 3. The environment does not impose its will with unmitigated rigidity. He is not enslaved by it. The individual remains a separate being. Differentiation goes on apace but always in conformity with the larger human pattern. Like the apple he moves within the gravitational orbit prescribed by social forces. He enjoys the liberty that accrues to conformity. It need never be the conformity of extreme homogeneity. Variants are tolerated as long as their behavior harmonizes with the larger purposes of the group. The Law of Differentiation presses upon the membership status of the individual. The individual exists and behaves through the group. "The whole functions always through its parts." It never wholly surrenders its position of dominance.

Law 4. The organism, whether one-celled or multicelled, simple or complex, undergoes a simultaneous evolution of properties and parts. So does society. It does not expand like a wall, through the addition of bricks piled one on top of the other. Its growth is not uni-stratal. Rather does it follow the growth pattern of a plant; root, stem, and leaves make concerted progression. Its evolution is multi-stratal. A like unitary evolution is manifested by conscious behavior. The individual does not expand through a summation of the products of knowing, feeling, and willing. The cognitive, affective, and conative processes are not separate and distinct aspects of mental life.

The genesis of conscious behavior affords no evidence for the traditional tripartite division of experience. In perceiving a toy, a child gets the impressions of outline, form, size, and position. There arises also a feeling of pleasure and other emotional accompaniments such as joy or fear. The act of reaching for it is a form of purposiveness, of goal seeking which is conative in character. Again, familiarity with the toy arouses a feeling of pleasure. This experience is inseparable from the perception of it and involves the will. Desires and determinations are seemingly predominantly conative. Yet there can be no desiring or striving unless there is a goal, definite or vague, direct or remote, and that goal needs to be recognized in its spatial and temporal aspects, a purely cognitive process. Mental life then follows the dynamic Law of Unitary Evolution. The individual knows, feels and wills according as the undifferentiated store of energy becomes particularized as cognition, affect, and conation. Knowing is the feeling of strain accompanying perception, and the striving for the goal that cognition discovers in the environment.

Law 5. The individual is the theatre of adjustive stresses which demand resolution. The resolution must be accomplished in the most direct way. The Law of Direct Action so decrees. A child sees an object and forthwith reaches for it. He stubs his toe against a stone and an angry outburst ensues. A pugnacious child is thwarted in his pursuit of a goal and he flashes into action. Direct action is not always socialized action. It is not concerned with the legitimacy of the goal. The relations between the individual and society may end in discord. The individual is primarily preoccupied with the tension and inner disturbance produced by the unsettling of the internal balance.

To restore the balance he releases all available potential. If the direct path is blocked — by taboos and prohibitions — he resorts to Freudian detours and by-passes popularly known as mechanisms. These are compensations, rationalizations, sublimations and regressions, and introversions. The thwarted individual may discover another route and another terminus for his blocked energies and give it respectability and adequacy by persuading himself that the new goal is as fruitful in its satisfaction. Thus the seclusive individual becomes a day-dreamer, the sadistic person resolves the tension to cruelty by joining the ranks of anti-vivisectionists.

Law 6. The genesis of defense mechanisms is found in the urge to preserve the integrity of the individual. Any invasion of personality, in its pursuit of the goals of self-esteem, self-assertion, self-expression and self-determination, are met with a counter-offensive in which the maximum energy at the disposal of the individual is mobilized. Rules ruthlessly enforced, injunctions tyrannically imposed, discipline rigorously administered, ideas and customs arbitrarily imposed, advice gratuitously offered, commands brusquely given, criticism carpingly uttered, are universally received with mixed feelings that run the gamut of emotional disturbance from contemptuous indifference to active hostility. To dispel antagonism and ensure the acceptance of disturbing ideas by modifying ideas and beliefs, the total behavior pattern of the individual must be altered and the menacing character of the intruding personality dissipated. The personality will fight for the preservation of the status quo just so long as the feeling subsists that the susceptibilities are threatened with invasion and it will do so under the impulse and with the momentum of the Law of Maximum Work.

Law 7. In his relations with the social group, the individual responds to the totality of any situation arising from such relationship. It is not a segregable definite stimulus that he reacts to but to a stimulus in a context of a social pattern. If the teacher's attitude is one of constant chiding and "nagging," the child's evaluation of the teacher's personality is deeply colored by the reprehensible trait. There is no algebraic summation of good and bad qualities with due regard to the "pluses" and "minuses" of compensatory factors. But the teacher is consigned to the limbo of undesirables by virtue of one outstanding fault. On the other hand if criticism, no matter how harsh, is matched by generous praise and sincere commendation, the pupil's estimate of the teacher is founded upon a harmonious relation of the two attitudes. Phrasing it differently, pupil and teacher relationship grows out of reciprocal unitary reaction. They constitute two configurations in unitary interaction with each other.

Chapter V

TRENDS IN GESTALT PSYCHOLOGY

PROGRESSIVE CLARIFICATION OF THE ORGANISMIC VIEWPOINT

A summary of Gestalt theory may be of aid in understanding its trends: the atomists study the content of the mind and conclude that the mind works like a machine. They profess to know how it operates; to a certain point, evidence drawn from experimentation bolsters their knowledge. They are not sure how the psychic mechanism becomes assembled. Therefore the question of organization remains unanswered. The vitalists are dissatisfied with the mechanistic interpretation of the mind. They contend that all of man's reactions partake of a machine-like quality but that there is a force that activates the machine. They called it "soul," "*élan vital,*" "entelechy" or "purpose."

Atomists and vitalists disagree on yet another score. It concerns the relationship of wholes and parts. The former insist that parts come first; that the summation of parts produce the whole; that the sum of the parts explain the workings of the whole. The vitalists counter with the assertion that a force, like entelechy, must be postulated to explain the organization of the mechanistically assembled whole. They accept the explanation of behavior as a building up of reflexes by a process of additive coordination but advance the theory that such coordination is effected by an integrating force that possesses vitalistic properties.

Finally, mechanists and vitalists differ as regards the application of the mathematical and physical sciences to the problems of psychology. Both have shown themselves hospitable to the application of mathematical concepts to psychology. There is a marked divergence of view when they come to relate physics to psychology. The mechanists attempt to derive the laws of behavior from the mathematical-physical sciences but have fallen short of a complete derivation.

The vitalists despair of ever succeeding in reducing psychology to scientific principles owing to the presence of the indeterminate "plus" that operates to make of the living organism more than a machine.

The Gestaltists find themselves in thorough disagreement with both mechanists and vitalists. They advance basically different postulates:

(1) *The organism is a system of energy rather than a machine.* Machines, *e. g.*, the automobile, are the result of planning. They are not found in nature like falling bodies or human behavior. They are, it is true, systems of energy. But these systems of energy in nature are not machines. For natural events show a greater dynamic adaptedness than machines. Storms are examples of such dynamically driven machines. They are organized in nature into systems of energy. Man, too, is such a system. Nature has organized, in the same way, other natural systems which fall within the sphere of physics.

(2) *The whole adds up to more than the sum of its parts.* This postulate is to be interpreted to mean that the whole is not the sum of its parts to which a vitalistic factor has been added. It is to be construed as stating that the parts constituting the whole react reciprocally upon each other because nature exists in structured fields in which the activ-

ity of each part is determined by its pattern or arrangement. Part A, in the field of A, B, C, and D possesses no individual autonomy and cannot act through local determination. Its activity is derived from the energy engendered by the whole.

THE ASSIMILATION OF OTHER ORGANISMIC CONCEPTS TO PSYCHOLOGY

The concept of energy systems is being broadened to include the sub-concepts (1) Vector and (2) Valence. (*a*) In the conventional terminology of behavior, motivation and its terminus, goal, serves to explain the inter-relations between personality and environment. In other words, behavior takes place in a psychological field. In this field behavior is directed towards a goal. The directive force behind it, the strength of the drives, is conceived as possessing a magnitude. Viewed as an energy phenomenon, this force is translated into a vector. The psychological field is likened to a vector field in which every point is characterized by direction (away from and towards) and magnitude. The vector represents the potential at those points. (*b*) In the psychological field certain objects or events assume importance for the individual because they represent a need, feed a purpose, or constitute a half-finished activity. This object or event is experienced as an attraction or a repulsion. This state produces a tension which takes control of the motorium. The object or event which produces such state is said to possess "a valence." The valences operate as field forces for they direct the psychical processes.

By means of the concept of valence, Gestaltists explain the conflict situation. These conflicts are the result of the opposition of field forces of approximately equal strength. A desirable goal is said to display positive valence; an undesirable, negative valence. The child is torn between the desire to go swimming and the temptation to play ball. The situation is schematized thus: the child (C) is

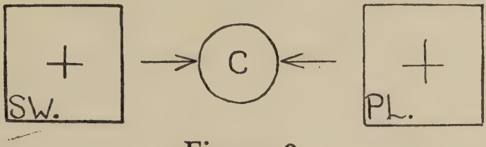
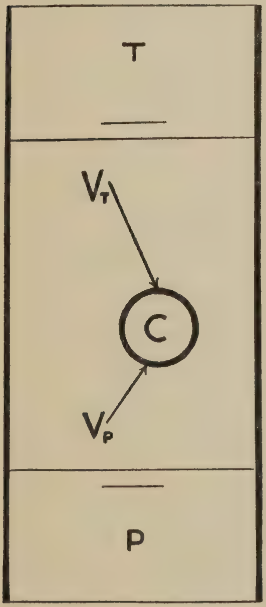


Figure 9

drawn by positive valences towards swimming (sw.) and towards playing (pl.).

The child may also face a situation possessing both positive and negative valence. For example, he wants to play truant and is afraid. He may also find himself hemmed in by two negative valences as when the parent attempts to force a child to eat something he doesn't like. Such a situation may be represented thus:



The child (C) is beset by a threat of punishment (Vt) and by his own resistance (Vp). Here both valences are negative (—).

Figure 10

CLASS THEORY AND FIELD THEORY

(*a*) *The Antithesis between the Class Theory and the Field Theory.* As a prerequisite to the understanding of the antithesis between class theory and field theory we must clarify the distinction between phenotypic descriptions and genotypic descriptions. In the statement, "The apple is round," we use the "language of data." It registers an experience which is expressed in the ordinary language of phenomena. This type of description is couched in phenotypic language and constitutes a phenotype. By a genotype is meant the underlying dynamic situation of which the phenotype is an individual expression. A forward child and a timid child represent two distinct phenotypes but both forms of behavior spring from a common psychological mechanism. In the language of Gestalt psychology, both manifest identically structured fields. In the Gestalt terminology, phenotypy is expressed in the language of data; genotypy, in the language of constructs. A construct characterizes the dynamic elements common to many data which are logically connected.

(*b*) *Class Theory and Field Theory.* We may now elucidate these theories. Much psychological thinking has been directed towards the abstraction of common characteristics and the formulation of generalizations about behavior. These generalizations are set up into categories which form the constituents of "human nature." Those who display traits in consonance with these categories are characterized as "normal." Those who display marked divergence from such "normal" behavior are said to be "abnormal."

The normal person typifies a class. His behavior is explained on the basis of such class membership. John is selfish because he belongs to a class that displays selfishness. John's selfishness is thus explained. His behavior is explained on the basis of the abstraction of certain class properties and is assumed to be energized by vitalistic forces resident within the individual. In the field theory, behavior is a product of the interaction of the individual and the underlying field structure in which he finds himself. In the class theory, the individual's behavior is deduced from his class characteristics; in the field theory, such behavior is assumed to be derivable from the underlying field structure.

The differences between class theory and field theory may be sharpened by pointing out the bases of their antithesis :

Class Theory	*Field Theory*
(1) The behavior of individuals is conditioned by their class properties.	(1) The behavior of individuals springs from the environing "field."
John behaves according to the dictates of his human characteristics;	John's behavior is a function of the "situation."
(2) Individuals are subject to local determination.	(2) There is no local determination.
Purpose and drive spring from within the individual;	all behavior is activated by forces inherent in the field structure.
(3) Behavior is ascribable to a form of entelechy.	(3) The directing force behind behavior displays vectorial properties.
Behavior is vitalistic;	behavior follows the line of field force.

(4) Class concepts are primarily "substantial."	(4) Functional concepts dominate field theory.

The "substance" of behavior is paramount; behavior cannot be adequately explained by the nature of its content.

(5) Analysis is made on the basis of regularities.	(5) Ahistorical - typical laws are its chief concern.

Explains present behavior by past experience; phenotypical experiences are inferior to genotypical constructs because phenotypes may be measured and therefore they permit of the predication of future behavior. Field theory attempts a strictly ahistorical science.

(6) The analysis favors dichotomies.	(6) The analysis rejects dichotomies.

Divides individuals into mutually exclusive classes (normal and abnormal); denies the justification of strict dichotomies (normal and abnormal); behavior displays degrees of psychological field structure.

(7) Class theory is concerned with a metaphysical "why?"	(7) Field theory studies the scientific "how?"

Attempts to show "why" events are related; it asks "how" they are related and answers, "by logical necessity."

THE APPLICATION OF TOPOLOGICAL CONCEPTS TO GESTALT PSYCHOLOGY*

(A) The Meaning of Topology: Topology is a branch of Geometry. It deals with continuity rather than size and shape. A penny and half a dollar are not the same geometrically but their mere roundness places them in the category of circles. If we punch a hole in a penny, it is still a circle, but from the point of view of topology it has undergone a vital change. Again, a penny with one hole is topologically different from a penny with two holes.

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* The diagrams have been taken, with the permission of the McGraw-Hill Co. of N. Y., from Kurt Lewin's *Principles of Topological Psychology* and *Dynamic Theory of Personality*. Diagrams 9 and 10 derive from the same source.

The difference lies in the conception of topological space.

Space is a set of objects or points sustaining definite relationships to each other. A rectangle is a space. It contains a collection or set of points. But these points are so organized as to conform to a certain structure. Take, for example, the Euclidian plane. It is composed of straight lines, each one of which is just a set of points. The space is a set of points with a specific structure organized into straight lines.

Topological space is a special space. It differs from non-topological space in the following particulars:

(1) *It includes the concept of "open sets."* A "set" of points is said to be "open" when it has no end points.

(2) *Concept of "surroundings" of a "point."* In Fig. 11 the totality of all the points which are included in A and B equals to the "sums" of A and B. The part which is common to A and B is called the "intersection." It may be also explained as the totality of points which are common to both A and B.

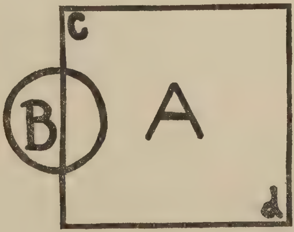

Figure 11

(3) *The Concept of "Region."* A and B are called "regions" — points c and d may be "connected" by a path which lies entirely within region A. A is a connected region because every point of it can be connected with every other point.

(4) *"Closed and "Open" Regions.* If we include the contour as part of the region we have a closed region. A disc is a closed region. The inner region of the disc is an open region.

(5) *The Concepts of "Cut" and of Simply and Multiply Connected Regions.* In Fig. 12 the cut c divides the connected closed region D into parts D1 and D2. For it is impossible to connect a point of D1 with a point D2 without crossing c or some other point of the boundary of D1 or of D2. Furthermore, cut c destroys the connectedness of D. Region D1 is said to be simply connected. If another cut like f is introduced the region becomes "two fold connected."

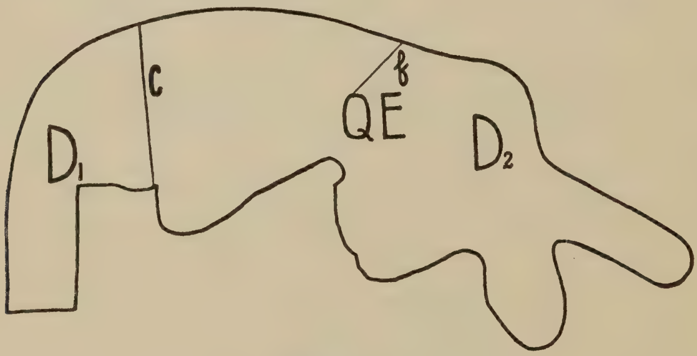

Figure 12

(6) *Concept of Manifold.* A manifold is a smooth surface without singularities. It is topological space whose local structure is the same at every point. A straight line and the

circumference of a circle are examples of one-dimensional manifolds. At each point the structure is that of a simple segment. The plane and sphere represent two-dimensional manifolds. Fig. 13 represents a tri-dimensional manifold.

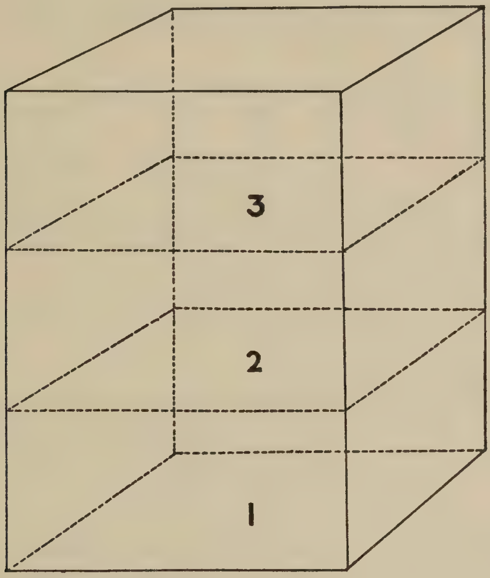

Figure 13

(7) *Concept of Structure.* Space may be divided into sub-wholes. When one can distinguish in space infinitely small regions it is said to be infinitely structured. These small regions differ as to the degree of demarcations which subsists between them.

(B) Application of Topological Concepts to Psychology: (1) Gestalt seeks the cause of a psychological event in the relationship between the person and his surroundings. The environment does more than facilitate or inhibit tendencies. It actually conditions them. Schematically, this relationship may be expressed by the formula $B = f\ (PE)$ in which P represents the person, E the environment and B the specific behavior reaction. Thus every psychological event is a function of the reaction between personality and environment. The totality of facts which determine the behavior of a person is topologically expressed as psychological life space. The relationship between the person and the situation is envisaged as "positions," *i. e.*, having spatial properties.

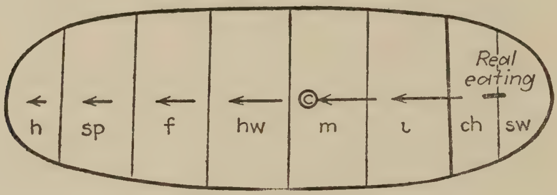

Figure 14

The topological concepts of region, connectedness and separateness and boundaries are employed analogically to behavior. The child subjected to the constraints of the home exhibits a topological picture. Within his life space he encounters regions, some forbidden, some free from restraint. The forbidden regions are delimited by boundaries. Under firm discipline these boundaries are solid.

In the shape of free movement, the child is left untrammelled by taboos. Within this space he is said to enjoy free locomotion from region to region. These regions develop into systems manifesting qualities of structure.

In establishing eating habits, the parental technique must take account of manifestations of repulsion. Under these circumstances the child is under pressure to proceed into regions of increasing unpleasantness to the more pleasant region of food consumption.

Fig. 14 represents the process in topological terms. This represents the situation prior to real eating. When the food is disliked the act of eating is broken up into dawdling movements, such as taking the spoon (*h*), putting the food on the spoon (*f*), bringing the food halfway to the mouth (*h.w*), bringing it to the mouth (*m*), chewing (*ch*), swallowing (*sw.*).

(C) Topology of the Psychological Environment: The psychological field sustains definite relations to topological space. In it the person and the goal are thought of as occupying segments of space particularized as point and region respectively. The line-region connecting these points is called a path. When a person sets out to pursue a goal he is said to engage in locomotion. Locomotion may be on a physical plane (a child going after a piece of cake); it may be on a conceptual plane (solving some problem). Psychological regions are conceived as bounded and the boundary is synonymous with barrier. These barriers constitute psychological and environmental difficulties a person encounters in striving for a goal. They differ as to (1) fluidity, (2) permeability.

(1) Situations are fluid when their structure may easily be changed (a child in the home finds situations more fluid than in school). In a similar sense, day-dreaming goes on on a plane of lesser reality than perception owing to the greater fluidity of such field. We may assess the respective degrees of fluidity by measuring the memory for perceived acts as against the memory for phantasied acts.

(2) Barriers exhibit different degrees of permeability, depending upon the ease with which locomotions through them are achieved. In emotional conflicts barriers are en-

countered. Some barriers are impassable; others display different degrees of rigidity but permit of accessibility to the region beyond. When the barrier is pierced, locomotion is resumed in the direction of the goal.

(D) The Topology of the Psychological Field of the Individual: Individuals *A* and *B* differ as to many traits. *A* is highly intelligent, plays tennis and is successful in business. *B* is less intelligent, plays no games, and is but an indifferent mechanic: *A* is considered to be more complex than *B*. This is a phenotypical description. To describe them genotypically is to refer their characteristics to a dynamic factor, the degree of differentiation. Such differentiation on the basis of traits is less important dynamically than their degree of integration. *A's* intelligence may be correlated with his business acumen and motor dexterity. He manifests a high degree of permeability between the cognitive and motor regions.

The field of the individual is undergoing constant changes. During childhood these changes are physiological and are followed closely by psychological changes. These occur as a result of a felt need which in turn brings about a state of tension. Tension comes about simultaneously with the perception of the goal calculated to satisfy the need. Taken in conjunction, they form the person's tensional system. It constitutes the energy for the vector which initiates human behavior. The operation of the tensional system in relation to a goal may be shown schematically (p. 119).*

In this diagram the psychological field is a bounded, limited region. Both the direction and the magnitude of the activity are defined by the vector. Behavior within this field is characterized as locomotion. It applies equally to physical movement towards a goal or locomotion towards a conceptual goal.

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* Reproduced from Brown's *Psychology and the Social Order*, by permission of the McGraw-Hill Book Co., N. Y.

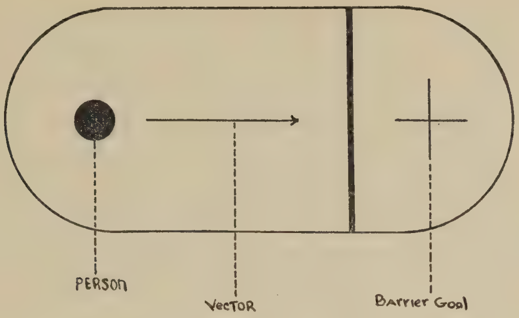


Figure 15

A not inconsiderable amount of evidence has been accumulated in support of the supposition that human activity is explicable on the basis of tension. Zeigarnick invited subjects to perform a series of tasks. He permitted them to complete only half of them. Immediately after the interruption they were instructed to write down the tasks on which they had worked. Of the completed tasks they recalled twice as many as of those interrupted. Ovsianka repeated the experiment, making use of the same tasks. He discovered that interrupted tasks were resumed whenever possible. The interruptions took on the complexion of blockages. Yet many tasks were completed after interruption. These experiments demonstrate that behavior is conditioned by tension in the psychological field and that blockages do not extinguish the tension. The person's reaction to blockages plays a decisive rôle in personality development. Individual differences emerge with regard to the time and energy spent in overcoming blocked-goal situations.

The human mind, unlike the animal mind, is capable of pursuing not only physical goals but also conceptual and social goals. Here, too, differentiation among individuals becomes apparent from childhood on. Such differentiation is predicated on the maturing of another dimension of the psychological field in addition to the two-dimensional locomotion from a need to a goal. This is the reality dimension. Reality, according to Gestalt psychology, is an inclusive concept which comprehends the notion of unreality — an irreality postulated by other schools. Phantasies and dreams are of the same order as perceived events; the difference is only a matter of degree. "All psychological locomotions occur in planes of varying reality."

The particular plane of reality which the individual occupies is also subject to variations. It is conditioned by the momentary posture of the psychological field. An amateur tennis player performs on a lower plane of reality than a Wimbelton contestant. The schizophrenic is one who has undergone a displacement in his reality plane; his day dreams suddenly take on the aspects of high reality.

The various planes of reality are said to possess various dynamic properties:

(1) The plane of lesser reality is more fluid and its barriers are more permeable. If one were asked to memorize numbers that have no significance for the individual and a series of statistical figures that relate to one's work, the former would be forgotten more quickly than the latter. For abstract numbers possess a low degree of reality. The more reality material evidences, the firmer is it embedded in the mind and the more compulsive it becomes in influencing future behavior.

(2) Acts in various levels of reality possess different compensatory values. Mahler made use of Ovsianka's experiment but invited the subjects to complete the interrupted tasks in spheres of varying reality. Intead of actually performing the acts, the subjects were interrupted and in-

structed to complete them verbally. He also invited them to substitute other performance tasks for those interrupted. He found that in the performances where no substitute motor activity followed the interruption, more than twice as many acts were resumed than were continued in tasks for which substitute activity was supplied. Specifically 67 per cent of the interrupted acts without substitutes were resumed. Of those cases for which a substitute was a motor act, 29 per cent resumed the task. The substitute discharged the tension for all but the 29 per cent. When talking was substituted for motor activity, 42 per cent resumed the task, and 67 per cent were resumed where there was no substitute. Here, again, the substitute only succeeded in discharging the tension in 42 per cent of the cases.

(3) The instinctive reaction to blockage is a discharge of tension on a plane of lesser reality. When an individual is thwarted in the pursuit of a goal, he is likely to resort to a phantasy solution of the difficulty. The child who is rebuffed by his playmates fancies himself in a situation in which he triumphs over his tormentors. The use of alcohol and drugs by frustrated individuals is resorted to because narcotics permit the free play of phantasy. Field pyschology rejects the Freudian concept of "flight from reality" in favor of the notion of flight into a plane of lesser reality.

(E) Personality Structure: The topological conception considers structure as fundamental. Thus conceived, the mind presents a complex of regions narrowly or remotely related as systems of wholes and sub-wholes. Native endowment in the form of capacities and experience as the product of response to blockages, diversify the personal psychological life space into regions of unitary Gestalts. Their psychological significance derives largely from the individual's enrichment of reality dimension. The reality dimension is a homogeneous conception in that it embraces unreality or "irreality." In so far as topological psychology recognizes reality as basic in personality development, it is in substantial agreement with Freud's reality principle. However, it imports into the concept a dynamic quality by virtue of which the individual is enabled to construct a sort of psychological escalator designed to provide ready access to and from the different planes of reality.

The theory of personality structure is the outgrowth of the experimental work of Kurt Lewin and his pupils. Since the theory is rather novel, it may lead to a better understanding of it if an example of their experimental technique is described at some length. The experiment concerned uncomplicated cases of feeble-mindedness. Unlike the pioneers in the measurement of intelligence, Lewin addressed himself to the investigation of the spheres of will and need rather than intelligence. The subjects were defectives from the schools of Berlin and included samplings of morons and imbeciles. In age they ranged from six to twelve. Control experiments were performed on normals of the same age distribution. The experiments concerned (1) the process of satiation, (2) the process of unsatisfied need, and (3) substitute value of substitute action.

(1) *Psychical Satiation.* Satiation is the lapsing of a positive valence into a negative or neutral one. The problem of satiation afforded an opportunity to probe into the dynamics of needs for the reason that the feeble-minded are customarily thought to tend to repetition and to display little persistence in working. The subjects were instructed to draw "moon faces" until they had enough of it (free drawing). The children worked until they reached the satiation point. Some kept on beyond it. When they stopped they were asked to continue drawing anything they wanted. No substantial difference was discovered between

the performance of the feeble-minded and the normal in point of duration as measured in minutes. However, the feeble-minded differed from the normal in two particulars:

The normal were entirely satiated with drawing of moon faces much sooner than the feeble-minded. But they were willing to continue with free drawing. On the other hand the feeble-minded busied themselves exclusively with moon faces, and, once satiated, refused to proceed with free drawing.

The course of satiation also differed in regard to its continuity. As the performance proceeded indifference set in as a result of the conflict between the wish to continue (positive valence), and the manifestations of satiation (negative valence). In the normal, the onset of satiation led to many pauses for rest and for the transition to free drawing. But in the feeble-minded, satiation in terms of a mounting conflict, was evidenced by longer pauses for rest and a tendency to complete cessation of the activity. There was no desire to shift to free drawing. Lewin attributes these differences to the presence of "functional rigidity, or immobility of the psychic material." The normal persists in the performance of the task because his response to the conflict is more elastic, more yielding. He either stops to mobilize his energies, or proceeds to detour by means of a secondary activity like free drawing. Hence, his action is continuous while the feeble-minded follows the "either-or" approach — he works at the task or stops completely.

(2) *The substitute value of substitute action.* The interruption of a task produces a tension system. Release from tension is brought about either by the resumption of the task or by the substitution of a psychologically satisfying substitute action. When a substitute action inhibits resumption it is said to have substitute value.

There are degrees of homogeneity and therefore corresponding degrees of compensation value. Such gradations may be measured by determining how completely each substitute action blocks resumption of the original action.

Now, the individual's response to substitute or compensatory action is an indication of the rigidity of will. Köpke proceeded to test it on both normal and feeble-minded. He found the following results: when the substitute action approximated in reality value to the original task, the normals resorted to resumption only in 16 out of 49 cases while 29 out of 31 feeble-minded did so. They displayed the inflexibility and stereotype observable in the feeble-minded.

Basing himself on these findings, Lewin formulated his theory of personality structure. Individuals differ in structure, according to the following:

(1) degree of differentiation
(2) differences in psychic material
(3) differences in tension systems
(4) differences in content

(1) *Degrees of differentiation.* From childhood, the individual undergoes differentiation in his psychical regions and systems, such as life spheres like family, friendship and profession. As a child, he shows less pronounced stratification. He is a unitary system. The degree of differentiation is linked up with the type of differentiation. Parts of the systems of persons are developed in an unequal degree. Some are closely knit together, others are more or less isolated. In some individuals such delimitation takes on the form of a split personality.

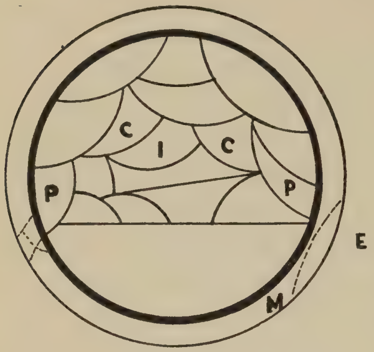
(2) *Differences in material.* Diversities in structure are further differentiated by the ease with which they change. They display such qualities as dynamic softness, elasticity, hardness, brittleness or fluidity. In the individual's orientation to the environment, these qualities decide his capacity

for adaptation. A person with rigid systems finds it difficult to build situations into a way of living by viewing them as wholes. He is either in one situation or in another. He cannot envisage them as sub-wholes of a larger whole. He is enslaved to the momentary situation, is completely contained, bounded, by it. The failure to transcend stratified situations accounts for the peculiarities of the feeble-minded. The great persistence of the feeble-minded is thus attributed to this segregation of situations. He is repelled by a new situation, no matter how closely it resembles old ones, by reason of its apparent closedness and its seeming lack of similarity to the old.

(3) *Differences in tension.* Tension is present in the satisfaction of a need. Individuals, however, differ in the state of the system. Some tensions change slowly, others more rapidly. This state of tension is an enduring quality of the individual. It plays an important part in adaptation for it determines the facility with which conflicts are solved. When the state of tension is insusceptible of rapid change, substitution takes place with difficulty; and, substitution with its compensatory value points the way to the resolution of conflicts that are complicated by impenetrable barriers. The state of tension that characterizes the feeble-minded accounts for the great difficulty he encounters within a conflict situation.

(4) *Differences in content.* The goals, ideals, and the meaning of the individual's sphere of life show marked differences. These depend on cultural forces which constitute his environment. The country child and the city boy display differences in the meaning of the contents of the personality systems. So do the members of different nationalities evince historical influences. Content is more responsive to cultural influences than material properties and the personality structure.

Lewin's conception of personality structure may be shown thus:*



l — inner personal region
c — central part of l
p — peripheral parts
M — motor-perceptual parts of l
E — environment

Figure 16

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* Adapted from Lewin's *Dynamic Theory of Personality* (McGraw-Hill Co.)

CHAPTER VI

THE PURPOSIVIST SCHOOL OF PSYCHOLOGY

PURPOSIVISM IS GOAL-SEEKING

BEHAVIORISM would abolish consciousness. Functionalism envisages mental life as a capacity to know, feel and think when confronted with a problematic situation. Both consider it relatively quiescent in the absence of the situation: the conditioning stimulus and the problem which set it in motion. Otherwise it remains inactive until internal stimulation, hunger for instance, prods it into activity. Purposivism, which should be distinguished from purposeful thinking, or thinking with a purpose supplied by the situation, contends that mental life is hormic or goal-seeking. McDougall, the foremost Purposivist, maintains that the driving forces for consciousness are innate urges or tendencies, chief of which are the submissive and self-assertive tendencies. Man strives to become master of those environmental forces whose subservience might minister to his well-being. He is just as eager to play the slave if submission will yield equal satisfaction. He wages a ceaseless struggle for the domination of the physical and material world while yielding unquestioned obedience to the divine in nature and man.

This purposivism is exercised in goal-seeking. The psychological term for it is conation or striving. It is not a part of the stream of consciousness and is not unlike the force of momentum generated by a stream with its current in full flow. It is conceived more as the well-head which gives volume and direction. It is less a function than a faculty, less an effect than a cause. Nor can conation be localized. The seat is not in the thalamus or in the cortex; it is independent of the physical brain states. Honesty and truthfulness as a mode of conduct or as an ideal does not grow out of bodily states (nervous excitation and visceral disturbances) nor out of the moral implications of social situations flowing through the senses to consciousness. Purposivism is, in addition, the organization of wide ranges of experience instinct with a reasoned purpose which manipulates the experiential data somewhat like scientists working over experimental data. Honesty and truthfulness as ethical conduct emerge and are precipitated by conation into moral principles. These principles, products *in* consciousness, awaken the proper emotion and energize the impulse to the appropriate action. Schematically, Purposivism may be thought of as assuming the sequences shown here.

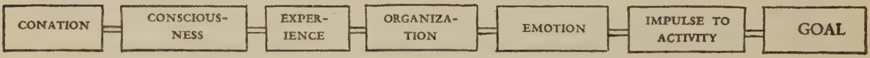

Figure 17

THE PURPOSIVIST IMPLICATIONS OF INSTINCTS

As long as psychology was limited to consciousness instincts were not considered to fall within its purview. They were regarded as wholly within the province of the natural sciences. The researches of zoologists had brought to the fore the remarkable phenomena of animal behavior transcending in complexity the simple patterns of reflexes. They were classified as instincts. Their workings could only be explained on the assumption of the existence of a Divine Clockmaker who so competently put the reflex mechanism together. The Darwinists offered the alternative explanation of the evolution of instincts through inheritance but the neo-Darwinists rejected it. The latter adduced proofs in support of their position. Among these was the evidence that certain insects laid their eggs but died before experiencing the results of their action.

James' preoccupation with instincts brought the subject to the fore. But it was McDougall who made instincts central in behavior. His definition of conduct is pointed toward a clearly defined purposiveness. For him conduct is characterized by (1) activity independent of a stimulus, (2) cessation of action as a consequence of change in the situation, (3) re-alignment of psychic forces to meet any alteration in the old situation, and (4) repetition of the same or similar actions resulting in facilitating future conduct. So conceived, behavior cannot be viewed as an isolated process characteristic of mechanistic reflexes. It derives, rather, from the cooperation of the whole organism.

McDougall also stressed the primacy of instincts and assigned to intelligence the rôle of an instrumentality by which the purposiveness of innate capacities is more effectively exercised. It employs motor mechanisms freely and adaptively. But singly or collectively, instincts serve as motivators of all human activity from faint thoughts to complicated problem solving.

The purposivist conception of behavior contrasts sharply with that of Watsonian behaviorists. They clashed heatedly as regards their views on (1) mechanism and teleology, (2) "empiricism" and "nativism." The mechanistic explanation of behavior came into violent conflict with the purposive orientation of conduct. Again, the Behaviorists emphasized "empiricism," the exaltation of experience over innate capacities. McDougall stresses "nativism," the existence of an innate structure of the soul which, unlike the equally innate mechanism of Watson, is imbued with a purposiveness that does not derive exclusively from the dynamics of the isolated situation.

PSYCHOLOGICAL BASIS OF PURPOSIVISM

The goal-seeking proclivity of the human organism is conditioned by the momentum of innate tendencies known variously as instincts, trends, drives and dispositions. In the early stages of maturation each acts independently to encompass some special goal. Hunger impels the organism towards the attainment of food. While each one is thoroughly integrated as to its own component cellular structures, it remains for a long time far removed from a socially adequate integration of the personality. The process of integration goes on apace, ever striving to bring the individual into closer harmony with environmental forces. It is given to but few individuals to attain perfect integration. Each advance is made in terms of experiences which demonstrate to the individual the wisdom or unwisdom of persisting in certain modes of behavior. Some habits and attitudes become more firmly established while others are modified, altered or discontinued. The world of things, ideas and people becomes invested with emotional interest and becomes differentiated into sentiments such as the sentiments of love and hate, admiration and contempt. Structurally, the core of the sentiment is an "object," whether idea, thing or person, held in a matrix of feeling. Each one is a distinct entity and because of its independent functioning, results in acute disharmonies whenever they clash. Slowly the warring sentiments are reconciled in the interests of a unitary personality by becoming organized into a hierarchy in which each one is assigned a rôle of relative subordination to the dominating, harmonizing master sentiment, the individual's life goal. Each successive stage of organization signalizes an advance in the formation of character.

The process of integration involves the crystallization of emotional and instinctive tendencies into habits and sentiments. Each instinct possesses characteristics peculiar to itself. It is sharply demarcated from other instincts by the structure of the responding physiological mechanism, by the stimulus which sets it off, and by the emotion which furnishes the drive. In its totality it constitutes a behavior mechanism, which, when stimulated by an appropriate stimulus, creates a condition of unrest that demands appeasement. This unrest is translated into an urgent striving or conation which lapses into quiescence upon reaching a terminus — an experience which allays the cravings of the instinct. When bodily conditions induce hunger, the food-seeking activity of the organism is energized into a conation and the accompanying state of discomfort does not abate until food is found. Any thwarting obstacle causes the animal to redouble its efforts. Anger supervenes to intensify the conation, which only comes to rest with the devouring of food.

The instinctive patterns of human beings manifest a surprising uniformity with those of animals. They are less adequate for the maintenance of life because of the highly complex environment of man and the consequent diversification of his wants. Human instincts, therefore, must be supplemented by acquired behavior mechanisms. These are habits and sentiments. As we shall see, they are not new creations. Rather are they transformed instincts, which, while preserving their pristine vigor and vitality, endow them with greater flexibility, orient them towards higher goals, and free them from the tyranny of the unique stimulus-situation which activates each instinct.

Habits are divided into primary or simple "motor habits," and secondary or "conation habits." The former are skills like writing or driving a car. They derive their motivation from instinctive trends, such as curiosity set off by the new task, constructiveness, the urge to manipulate, self-assertion and self-display, the desire to exert our will over things which more remotely serve as the source of activated conation. The acquisition of the motor habit is the end-experience which quenches the conation. It does not set in motion another conation. It simply expresses the conation.

There is another class of habits capable of initiating conations directed towards definite and explicit goals. The latter derive stimulus from the meaning cognized in the object which occasioned the formation of the original habit. The instinct that released the first conation continues to supply a source of energy but the meaning distilled from the relevant stimulus reenforces the original conation and endows it with the power of varying the response in consonance with added experience and the exigencies of the situation. The hungry infant who learns to reach out for the bottle is acquiring a motor habit. Later he may become self-active by bringing the nipple, the milk, the sugar and the milk receptacle to his mother and begging her to prepare his meal. Here we have the same instinctive energy, hunger, the original stimulus, the bottle. But the stimulus "bottle" elicits a series of additional responses which signalize an enlargement of the boundaries of the motivating instinct. The relevant stimulus "bottle" had acquired dynamic power. It had become a source of conation, operative in the formation of its conation type of habit. The progression may be depicted thus:

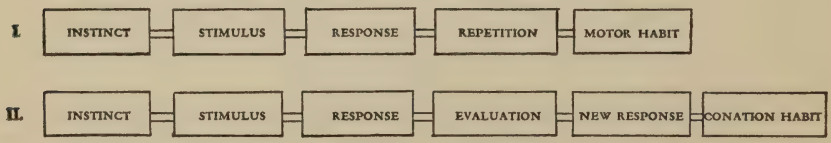

Figure 18

When a stimulus becomes imbued with meaning it confers upon it prospective significance. The pleasurable emotion which it generates fixates the response and hardens it into a habit and results in the acquisition of a relatively permanent attitude of mind towards the thing or person which constitutes the stimulus or "object." The pleasurable tone that accompanies a satisfied conation evokes the feeling of "liking" and any unpleasant feeling engenders "disliking." The liking and disliking do not ramify to remotely associated objects. One's liking of a person is so tepid as to arouse no antagonism when he is severely criticized or when one's friends refuse to share in the feeling. On the other hand, one may dilate with pleasurable emotion when that person is praised or when good fortune smiles upon him. When such reaction grows fairly stable, the object is said to have become incorporated into a sentiment. It is defined as "an acquired and relatively permanent attitude of mind toward some person or thing, affecting behavior toward the object in a relatively stable and definite way." In a conation habit, the object has meaning. In a sentiment, that meaning is expanded and rationalized and accorded deeper significance for the welfare of the experiencing individual.

This acute awareness of the significance of an object tends to enlarge the idea of the self. First the object is identified with it. It becomes the "Me" of our thought as distinguished from the "I" of instinctive behavior, the primary experient and active self. In time, the egoistic "I" gives way to the altruistic "Me" as the process of identification of the self with other selves continues apace. The narrow and intimate self of the "I" may be superseded by the broadened secondary self of the "Me." The sentiments of love, friendship, loyalty, hatred and respect play their part in bringing about the transformation.

So great a diversity of sentiments is bound to bring them into conflict. Fortunately, one sentiment soon gains the ascendency over the others, harmonizes their activities and composes their antagonisms. This is the master sentiment, the self-regarding sentiment. Driven by the instincts of leadership, subjection and gregariousness, the self discovers the type of behavior that ensures their satisfaction. The "give" and "take" of life establishes the terms upon which the self can collaborate with the other selves to the best advantage of both. The relationship that the self comes to sustain to the other selves imparts to each one a meaning which eventuates in a sentiment of respect. Respect for others generates respect for the self or self-respect. The qualities and capacities that one learns to admire in others, one strives to attribute to himself. One comes to think of one's self as an individual of whom a certain kind of behavior is demanded because he believes himself to be that kind of an individual who cannot act otherwise: He is honest because his kind of person cannot act dishonestly.

The self-regarding sentiment is central in development of personality because it is shaped during childhood. The fructifying force is suggestion. The spoiled child forms false ideas as to his importance. He is apt to assume the rôle of leadership without the proper conception of his merits and of the advantage of submission. He thrusts leadership on others instead of having it thrust upon him. His appraisal of his capacities is influenced by the attitude of flattering or hypercritical parents and friends. He is apt to become smugly complacent; or his confidence is subverted to the verge of inferiority. His conception of his worth as a moral being grows with the development of his power of analysis and abstraction. Here, too, a lack of parental confidence in his moral strength may serve to relax the moral fibre.

The part played by sentiments in the building of character is decisive. The impulse behind the instincts is energized by the emotions. The instinct of fear is intensified by the emotion of rage. An emotion is not concerned with the claims of instincts other than the one to which it is attached. It waxes and wanes as the fortunes of the associated instinct determines. It is utterly indifferent to the fate of the whole personality. The emotional energy at the disposal of the individual behaves very much like a bolt of lightning seeking conductors. The diverse instincts are so many lightning rods drawing off its restless energy.

THE CONSTITUENTS OF PERSONALITY — PERSONALITY AND CHARACTER

A most undiscriminating terminology has grown up in respect of these terms. Both common and scientific usage are vague and obscure. The layman who envisages human behavior in its constant and salient features omits to trace them to their psychological origins and thereby misses their interactive relationship and the cleavages that demarcate one from the other. The scientist is often equally inept. He studies expressions of personality and character with the meticulousness of a physicist and forgets at times that the statistical and descriptive treatment of end-results are merely academic unless research leads to the discovery of the structure and dynamics of the neurological and psychological mechanisms that produce them. We are faced, therefore, with a bewildering multiplicity of "quotients," "indexes," and "types" smartly ranged in awe-inspiring phalanxes but we still do not know how the human beings so labelled and arrayed got that way. Instead of furnishing directions and specifications we get hypotheses and "laws" as diversified and ambiguous as the bulk of the laws promulgated by our legislatures.

In the absence of large-scale experimentation, we must place our chief reliance on considered judgment, which, in the sphere of psychology, is a blend of common sense, cool deliberation, progressive reflection, and scientific eclecticism. After all, both personality and character are class names for virtues and qualities recognized in their larger aspects since the dawn of civilization; and while science and superstition were not always sharply delimited by the masses, the accordant insight of millions has often been proven reliable. Deliberation and reflection may be forged into excellent instruments of achievement. As to our attitude to the finely spun psychological theories and precariously generalized observations, it may be well to keep in mind that since there are large gaps in our knowledge of human nature and since, furthermore, the distillation of the wisdom of the ages has yielded lore comparable in utility and dependability to the findings of experimental psychology, no evaluation of human behavior can dispense with the aid afforded by either proverb or principle, layman or scientist. The fruits of refined introspection, trained observation, restrained imaginative interpretation of experience, and long-range experimentation in psychologic segments of behavior, should be requisitioned to formulate a workable synthesis. This approach is not only sensible but inevitable. The physiology of personality and character is an unresolvable welter of factual and theoretical material, an agglomerate of physiology, endocrinology, psychology, and metaphysics, science, and phantasy.

It is not an exaggeration to say that there are as many definitions of personality and character as there are authors who treat of these aspects of human behavior. Some use these terms interchangeably; others consider personality as the species and character as the genus; still others read enough exclusive meaning into each to make of them distinct psychological entities. All writers, however, agree that in forming personality and character, nature and nurture, endowment and acquisition, heredity and environment play important rôles; they disagree as to (1) the relative proportion of the innate and acquired forces an individual must possess to qualify as normal in both personality and character, and (2) the degree of modifiability that life in the home, school and society can bring about in the individual's original mental constitution.

VARIANCE IN THE CONCEPTS PERSONALITY AND CHARACTER

It will take us too far afield to discuss the history of these terms. Consensus of opinion inclines towards the all-inclusive use of personality as a psychological totality of which character is a segregable entity. This subordination does not, in the least, obviate the task of the home and the school, nor does it bring about accord among those charged with human engineering. But it does lead to greater concentration by averting a theoretical splitting of the very entity whose unitary organization modern psychologies postulate.

McDougall charges that the discrepant definitions of personality and character are the marks of intellectual slothfulness. To a degree they are; common usage tends to perpetuate itself and to overawe scientific inventiveness, particularly when the rival term is a palpable translation into the langauge of the ancients. But absolute precision in terminology is difficult of attainment because any attempt to reduce human nature to a definitive psychologic equation only does violence to neurological and physiological factors which continually change the values of the prolific X's, Y's and Z's involved. Those who escape the dilemma by oversimplification or by an appeal to rational mysticism are amazingly facile in diagnosing abnormalities, but are apt to be distressingly futile in remedial treatment. Like the old treatises on radio: they offered several explanations of the causes of static, but they coud not help restore audibility when broadcasts were on the air.

McDougall views personality as the product of five factors: disposition, temper, temperament, intellect and character:

Disposition: All psychologies recognize an original endowment which manifests itself in the form of dispositions, trends, instincts or propensities. They come into conflict with environmental forces, the same energies displayed by members of the environing social groups and the cultural forces of civilization. The process of assimilation involves individual adjustment; an adjustment that never partakes of the wholesale quality of mass conversion because each individual possesses these original energies and urgencies. Such descriptive words as "kindly, timid, irascible, lustful, inquiring, sociable and fastidious" are applied to them, depending upon the original nature of the propensity thus accentuated. Subsequent indulgence or unrestraint may strengthen the original instinctive trends. Draconian discipline may energize natively weak trends in the course of victorious counter-attacks. But each individual comes into the world with a definite alignment of propensities which are gradually worked into the pattern of personality; they constitute one ingredient that makes for the distinctive flavor of his individuality.

Temper: The innate tendencies are liberated into the life current as a result of their native strength and urgency, but their set and continuity of direction depends upon another inborn quality, persistence. Persistence is modified by allied forces, such as intensity, affectability and their opposites. Some natures react to goals like lightning reaching out for conductors; they seem to be unaware of obstacles and uninfluenced by the pleasantness of success or unpleasantness of failure. Others are less expeditious and may be susceptible to discouragement. Their behavior is characterized by vacillation, fickleness and dejection. Temper, then, manifests itself in ardency, fickleness, placidity, steadfastness, vacillation, equableness and changeableness. Perhaps one phase of temper finds its counterpart in steeliness with its concomitants of inflexibility, brittleness, suppleness and tensile strength.

Temperament: McDougall defines temperament as "the personal qualities that are determined by the chemical influences of the bodily metabolism exerted upon the general working of the brain or nervous system." In discussing temperament we touch upon a vast unmapped terrain of endocrinology and foods. The ductless glands with their delicately balanced relations are no longer the intangibles they were thought to be. But their workings are still shrouded in mystery; and we know more of their effects when thrown into inbalance than of their contributions in the normal state of equilibrium. Yet the thyroid, the pituitary gland, and the suprarenal capsule have a profound effect upon development. But we cannot accept the teachings of the endocrinologists because to do so is to reject all of modern psychology — an alternative that would leave large areas of human nature in utter obscurity.

Temperament, also, is a function of the individual's power of resistance to fatigue. The factor of fatiguability is not readily abstracted from other factors of personality, particularly disposition and temper. Nor does it always produce its effects in isolation from multitudinous chemical processes that play upon it directly and indirectly. Yet there is evidence in support of the thesis that susceptibility to fatigue is another of these modifiable innate qualities that must be accepted as a datum of psychology. It can be explained away as readily as the behaviorists do mind and memory; but it leaves the individual a prey to the futilities of the educative processes, and makes a mock of human engineering and personality building. In the midst of the present chaotic condition of psychology it is the part of wisdom to credit nature whenever nurture cannot offer demonstrable proof of its claims. This is not meant as a stricture upon theorizing but it is rather intended as a measure of self-discipline in dealing with psychological speculation. For the impracticability of many current theories affects one unpleasantly in that they prove unequal to the demands of parents and teachers and force one to fall back on the dogmas of traditional psychology and ethics.

Intellect: The original nature of disposition, temper and temperament may be disputed by psychologists who set great store by transforming power of the cultural environment and who, therefore, view a great many discrete factors of personality as derivatives of one or two ultimate elements; but their innateness, particularly that of intelligence, is challenged by few. There is disagreement as to (1) its unitary quality predicted upon the presence of a "general factor" subsuming a manifold complex of distinct abilities, (2) its degree of susceptibility to improvement by educative forces, and (3) the rôle it plays in the formation of character, a rôle variously conceived as trail blazer, as discoverer of personality goals, as brake upon the instinctive urges, as the creator and enforcer of ideals beyond the ken of biological insight, or as the integrating power that enforces congruency and consistency on emergent modes of behavior. Whether it is coordinate with other factors or subsidiary to them, intellect is a contributant to the growth of personality. If its importance in our civilization has been exaggerated it is not owing to its inherent weakness but to the unwarranted use mankind has made of it. It cannot be used safely as a substitute for experience because its highest expression, abstract thought, transcends experience and lacking the power of divination, arrogates to itself the power of displacing it, thereby confusing the knowable with the unknowable. It, therefore, errs on the side of impracticability and often lays itself open to the charge of advocating the chimerical and visionary. Life is too tenacious of its secrets to yield them to armchair logicians. They must be wrested from it through the difficult process of living; not unlike the precious ores in the bowels of the earth, that cannot be mined by the mere writing of a treatise on metallurgy.

Character: The fifth factor of personality is character. It coöperates with intellect to weave the threads of disposition, temper and temperament into a pattern in conformity with the specifications set down by society. It rarely approximates these patterns because individuals differ markedly in respect of their original natures and in their resistance to modification; furthermore the use of "specifications" is merely figurative and elastic. Ideas of conduct vary in extensity and in intensity. The accent sometimes falls on one type of conduct, sometimes on another, and philosophical and psychological theorists bedevil the situation by a plethora of norms that seems to have been conceived in a social vacuum; others are launched upon the world with the blitheness and insouciance of a boy sending out successive constellations of fragile soap bubbles. Educators, therefore, are more concerned with moral codes than with morality, more with units of behavior than with conduct, more with experimentation for experimentation's sake than with living for the soul's sake. To enter upon discussion of character building is to embark upon an excursion into strange places and climb many towers of Babel. The journey is hampered by unmapped detours and by vague and misleading signs. It is, indeed, a sad commentary on human intelligence that the net result of the labors of our prophets, seers and scholars in the field of human engineering is a conglomerate of precepts, aphorisms and principles, hypotheses, dogmas and tenuous residuals of empiricism that expose the individual to the fortuities of trial and error and the vagaries of facile theorizers. The rise of scientific orientation has been directed chiefly to technology and a scientific psychology is still in an embryonic state. Research in psychology has been marked by a fragmentariness in which paucity of results has been charged to a tragic lack of coöperation. Laboratory facilities have been scant, and research institutions have displayed a geographic sectionalism as hostile and antipathetic as the distrust that alienates political and racial units. The plea that human nature is an unresolvable complex of dynamic elements should but redouble our efforts to concentrate our scientific resources upon it. It should, at least, systematize experimentation and pass all findings through a sieve of repeated verification. Instead of such cautionary approach, we dignify all investigations as "scientific experiments," we advocate serious changes in educational practice on the flimsiest of evidence and we dignify as "educational contributions" findings largely substantiated by statistical manipulation and the scantiest of experimental support. Indeed, these "discoveries" are given precedence over the refined experience of the race on the jaunty supposition that modernity has definitely broken with traditionalism, and that everything scientific is, by its very nature, revolutionary in its implications.

PERSONALITY IN AND OUT OF GEAR

Life, no matter how low in the scale of existence, has something of the nature of a going concern. Hence, the currency of the phrase, "the business of life." Beyond the protozoa, life is complex business, with many units and a large diversity in organization. In man, these units are a vast number of vitally important cells, organized into organs and mechanisms and unified by the action of the nervous system. This organizing power inheres in the nervous system as innate dispositions and improves with maturation and experience. In its highest form, it manifests itself as integration of all the unitary elements that go to make up life. It is directed towards their harmonious coöperation.

The innate organizational power operates through instincts, each of which becomes, in time, increasingly integrated as goal-seeking mechanisms. These are special goals, subordinate and contributory to the main goal of existence. Among these special goals the most important are food getting, the gratification of the sexual function, the forging of protective armor against the assaults of hostile environmental forces, the sharpening of the offensive weapons designed to overcome opposition or obstruction, and the building of a firm pedestal of solid accomplishment for the display of self-assertive prowess. Since each of these function in relative independence of each other, there is danger of disharmony. Therefore, the personality exerts a gradually increasing integrative control, its gradualness retarded or accelerated through experiences, the modifying effects of pleasure and pain, and the pleasant "take" and unpleasant "give" of coöperative living. As a consequence of such control the instinctive trends become thoroughly permeated with feeling and emerge as sentiments such as love and hate, respect and contempt, admiration and fear, oriented towards definite objects.

These sentiments, we have seen, are integrated to form systems and these, in turn, are brought under the domination of a master sentiment, the supreme goal of the individual. They constitute the guiding stars to which the wagon of ambition is hitched. It may not be a star of great magnitude. The master sentiment may be love of wealth or prestige. It serves adequately as a regulative principle as long as the conflicting sentiments are subjugated or at least mollified. The individual runs less danger of becoming the theatre of conflicts if he adopts a master sentiment with great potentialities for harmonizing discordant sentiments. The latter is called the sentiment of self-regard.

The integrative power of this sentiment is enhanced by the regulative power that inheres in lofty ideals. It helps to build an ideal self which subjects the claims of all sentiments to its arbitrament; an ideal self endowed with perspectives that reduce or expand values to such proportions as their relative significance warrants. However, this ideal self is not always in undisputed possession of the individual. It is constantly harassed by the claims of the empirical self, the self of wordly experience and base motives instigated by instinctual drives. The two selves strive for supremacy. If the ideal self is victorious, the individual is said to possess character. If the empirical self triumphs, or when the struggle is protracted unduly or remains unresolved, then the individual may undergo serious alterations of character. His mind may become the seat of deep-seated conflicts that may result in a double personality, each one in temperorary possession until ousted by the other. What determines the split in the ego is the degree of stability of the nervous system: *i. e.*, how deeply the habits and attitudes that implement each sentiment is graven upon it.

When a conflict among competing sentiments ends in the disruption of the personality, the personality is said to have undergone disintegration. The sentiment of an ideal of character is the only one that can successfully combat the ravages of disintegration. When it is present in a weak or ineffectual state, the assertive part of the personality is divorced from the submissive impulse and each becomes nuclear in a separate autonomic organization. The two become dissociated and maintain a separate existence. During the struggle for dominance over the individual, the habitual self may be partly displaced by the other; in serious cases of dissociation there may be alternation of control. In other words, the mind may slip in and out of gear, depending upon which self is in the driver's seat.

The sundering of the mind into different selves, then, is explicable on the basis of weakened solidarity between systems of impulses which have been associated under the pressure of affective bonds. Under the impact of a mental or emotional shock the bonds tend to relax unless counter-pressure is brought to bear upon the weakened point by a dictatorial sentiment informed by a singleness of purpose that will not brook diversion. This phenomena serves to explain why the sentiment of hate can regiment behavior so effectively as to quell all tendencies to disharmony. It can convert a loosely federated system of habits and ideals into a centralized organization which, while recognizing local autonomy, directs all major activities.

However, the authority of the regulating sentiment may be challenged by other sentiments. The challenge may take the form of a movement for more local autonomy or an out-and-out separatist movement. The reaction of the dominating sentiment is one of repression. It does not operate like the quasi-personality, the Censor, postulated by Freud. It follows the pattern laid down by nature for all energy: it seeks an outlet. Only psychic energy, or as McDougall prefers, conative energy, strives to reach a particular goal even if it has to detour by way of the subconscious. Any obstacle in its path is repressed. What is repressed is commonly known as a "complex." Into this form are compressed all impulses, wishes, and emotions that are subversive of the authority of the master sentiment. As complexes they continue to harass the individual by afflicting him with "conflicts." They lead an independent existence manifesting themselves in tension, dreams and phantasies. The rebellious activity of complexes is either liquidated by complete repression or by surrounding them with a *cordon sanitaire,* thus isolating them completely, or they split off from the parent personality by resorting to dissociation.

When dissociation has eventuated in a state of multiple personalities, neurotic symptoms make their appearance. Various hypotheses have been advanced to explain the essence of the neurotic symptom. The Freudian explanation is purely functional. It regards neurotic disorders as warnings sent out by the mind, advertising a condition of considerable emotional stress and strain. Of course it is granted that the resulting conflict is diffused throughout the neurological system just as a message is relayed through telephone wires. But this communicating system, like the telephone system, is not affected by the type of message it conveys: the neurones, nerves, and all brain centers remain unaffected by the condition of the libidinal energy in repose or in conflict. McDougall subscribes fully to the functional explanation of neurotic disorder but he insists on supplementing it with a neurological approach. He maintains that experience with shell-shocked cases has demonstrated that conflicts also affect the organization of sensori-motor neurones. In cases of conversion neuroses in which muscular contracture is a feature, deep anaesthesia abolishes the contracture but it often returns as the drug wears off. In amnesia a dissociative barrier isolates neurone systems.

The dissociation and the erection of neurological dissociative barriers work somewhat like this: In an emotional shock, the free energy, the neurokyme, rushes into the neurone system affected by the shock. It draws away the energy from all collateral systems, "as a rush of water down a main pipe sucks into its current water from collateral pipes."* This sudden and violent drainage raises the resistance at the synapses of the unaffected systems so that they become impassable to the nervous current. As a consequence, there occurs a dissociation of neurone systems which serve bodily organs, thus producing somatic symptoms whose lost function, as in voice in shell-shocked cases, is due as much to the shock as to a break in functional continuity between the neurone system serving the vocal cords and all other parts of the nervous system.

Dissociation does not always accompany or follow repression. McDougall displays a definite tendency towards the recognition of the predisposing causes enunciated by Jung. The extravert is more liable to hysteric disorders; he is characterized by dissociation. Conflict and repression without dissociation is the disorder that afflicts the introverted. They succumb readily to neurasthenic disorders. Mental disorders of a purely functional nature are explained by the mechanisms of repression and dissociation buttressed by Freudian postulates borrowed freely from Freud, Jung and Adler.

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* Wm. McDougall, *Outline of Abnormal Psychology*, p. 239.

CHAPTER VII

THE FREUDIANS

THE TRANSITION FROM THE "SUBCONSCIOUS" TO THE "UNCONSCIOUS"

"Consciousness" psychology was hard put to it to explain abnormal behavior in terms of normal psychology. Such phenomena as illusions, hallucinations, obsessions and illogical behavior could not be made to fit into a "norm" based upon the workings of conscious processes. Physiology afforded no comfort, for many abnormal symptoms have no discoverable anatomical basis. In the cases of traumatic neurosis evidence accumulated to the effect that the aftereffects of many psychic causes could not be referred to consciousness. It also became apparent that many pathological states evinced a transitory character and were succeeded by a return to normal. Normal perception and logical thinking underwent serious distortions under emotional stresses, yet it was felt that the evident illogicality of the resulting behavior did not warrant its stigmatization as pathologically abnormal. Furthermore, the test of logic could not be rigidly applied to the pathologically abnormal, for even among abnormalities there is to be found phenomena that display qualities of well-defined regularity and consistency. The obsessional neurotic builds up a logical system even though its logic is incomprehensible to the normal individual.

To explain behavior that could not be directly linked with consciousness, recourse was had to assumption of a "subconscious." It was envisaged as a sub-structure to consciousness, and was thought to be the source of unconscious phenomena. Communication between the subconscious and conscious was conceived as proceeding on a one-way path; only the conscious is accessible to the subconscious. Later the term "unconscious" came to be used interchangeably with "subconscious," but it was employed in the sense of "near-consciousness" or "'split-consciousness."

The evolution of the concept "unconscious" from that of the "subconscious" to the Freudian "unconscious" is credited to the investigations of the French scholars, Ribot, Janet and Charcot. They were attracted to a strange phenemenon which they described as "depersonalization." In certain abnormal states, the patients had a strong feeling that their total consciousness was abnormal; their "I consciousness" seemed to be isolated from their "I," or their "I" suddenly had split into two "I's" one of which was felt to be an interloper.

Charcot and his followers addressed themselves to the exploration of the phenomenon of hypnotism in its relation to hysteria. Freud studied with Charcot in Paris. He returned to Vienna in 1886 where he learned from his colleague, Breuer, of a pathological case. He applied himself assiduouly to its study and the germs of psychoanalysis were incubated. The case is historically important and deserves chronicling. The patient was a gifted girl who suddenly developed a complex of symptoms for which no organic causes were discoverable. She suffered from paralysis of the lower extremities, impairment of eyesight, difficulty in keeping her head erect, and lapsing of the powers of speech. In addition, she was unable to drink, although she experienced acute thirst.

Breuer had resorted to hypnosis. While in this state she talked incoherently of her sick father. Prior to the onset, she had been nursing her father but had been compelled to interrupt her ministrations when she fell ill. While hypnotized the patient spoke with deep emotion of an incident during her childhood in which a feeling of disgust had been aroused over the action of her governess in offering a dog a drink of water out of a glass. She then asked for water and awoke with the glass at her lips. Breuer's attention was drawn to two significant observations: relief followed the recital of her father's condition, and the inability to drink disappeared with the description of the governess's behavior.

Breuer and Freud studied similar cases of hysteric symptoms and concluded that the causal factor was to be found in what Breuer termed "psychic traumata" or emotionally toned experiences. They advanced the explanation that some influence was at work to prevent the discharge of these experiences into channels normally leading to consciousness. Instead of finding release in appropriate motor responses, the emotions were shunted into the bodily nervous system where they underwent a "conversion" into organic symptoms. At the same time, the memories of the distressing experiences were banished from consciousness into the unconscious through the process of "repression." The symptoms disappeared when the channels of normal discharge were restored. Breuer and Freud borrowed the Aristotelian term "catharsis" to describe the "purging of the passions" that takes place in the hypnotic state. Their conclusions were later embodied in two theories:

(1) Hysterical behavior is a substitute for normal psychic acts and therefore possesses meaning and significance.

(2) When this meaning stands revealed in the hypnotic state, the troublesome symptoms vanish.

The collaboration between Breuer and Freud was dissolved over a difference in interpretation. Breuer had insisted that the symptom-producing ideas originated only in the "hypnoid state." Freud contended that the mind's resistance to ideas that run counter to its ruling tendencies causes the unsettling of normal behavior. He discarded hypnosis in favor of free association. He persuaded his patients to recall things they had apparently forgotten and found that they voluntarily regaled him with a wealth of material which pointed unerringly to hidden meanings. This practice led to the discovery that alongside of neurotic symptoms are found functional errors, such as the forgetting of names, the misplacing of objects, and mistakes in reading. Here, too, the unconscious was revealed as harboring suppressed intentions — suppressed because of their discordance with the conscious. From this point forward, Freud expanded his psycho-analytic technique to include the interpretation of dreams. He has constantly re-examined the principles of his psychology, has added to them, subjected them to revision, and was hard at work in 1939, editing, organizing, elaborating, when he died.

THE FREUDIAN SCHOOL OF PSYCHOLOGY

Freud considers the mind from two points of view: the topographical or static, and the dynamic. Topographically, mind is made up of two compartments, fashioned like a lock in a canal. The lower level corresponds to the *unconscious*, the upper to the *conscious*. Ideas and desires are carried on the tide of libidinal energy toward the open sea of personal gratification. They cannot effect the passage of the lock unless they succeed in securing the benevolent coöperation of the person operating the machinery, *i. e.*, the censor. When such coöperation is denied, the importuning ideas and desires find ways of circumventing his vigilance by attempting a stealthy advance at night (the recourse to the dream), or by resorting to circuitous routes and portages symbolized by substitutive mechanisms and defences. They do not always lead to the original objective, nor is the detour traversed free from mental and physical hazards that effect a distortion of personality.

The dynamic view concerns itself with the constitution of the psychological self. This self is the highly mobile, ingeniously resourceful psychic force that endlessly modifies and transforms all stimuli which threaten its sovereignty in the sphere of self-determination. The aspiration to self-determination receives its impetus from the current of free-floating energy of variable volume and force, which activates the self in the direction of certain alluring objectives. The stream of energy is called *libido* and is deeply colored with sexual feeling. Libido has been overextended with meanings and surcharged with repugnances because of the desperate and misguided attempts to equate the term with *élan vital,* vital urge, the push of life, the primal urge, and thereby dispel the penumbra of invincible vulgarity with which Freud's detractors have invested it. For Freud has qualified the understanding of libido from "that force by which the sexual instinct is represented to the mind" to "the energy . . . of those instincts which have to do with all that may be comprised under the word 'love,' including both an emotional core of sexuality and an intellectual vesture of mental satisfaction." He has attempted a further classification by asserting that the term "sexuality" "goes lower and also higher than the popular sense of the word," — lower, to the pleasurable feelings arising from the activity of all bodily organs, especially the excretory and eliminative; and higher, to include the highest refinements of the altruistic motives which "love" as a nascent sentiment is capable of arousing. He has even imported into the concept libido duality of forces, the sexual instinctive drives and the ego or self-preservative tendencies. But he has failed to maintain this position, urging corroborative findings as justification for his insistence on postulating a sexual complexion of the libido; he found that self-preservative instincts are grounded in self-love of a distinctly sexual tinge.

THE COURSE OF THE LIBIDINAL STREAM

Genetically, the libido rises from the depths of being, an unplumbed spring from the sub-surface. Like its natural prototype it quickly mounts to the surface and begins to overflow. Its subsequent course depends upon the pressure at the well-head and the topography of the terrain. At this stage the libido constitutes the *id* or the unconscious. By *unconscious* Freud means the unknown, the "Unbewuste." It is comprised of instinctual forces and racial memories of which the self is often aware only as an undifferentiated and fretting restlessness. Its flow now becomes obstructed by environmental forces embodied in parental injunctions and the social milieu manifesting itself through the discipline of consequences. The elements are personal and impersonal "Do's" and "Don'ts" whose sanctions are accepted as valid for the individual. Part of the *id* has now entered the territory of the *ego*. A much larger part is dammed by the *censor,* a psychologic policeman who rigorously bars out libidinal urges which prove unacceptable to the ego. The ego, however, flows into several levels each with its own censorial dam, blocking a portion of the stream. The ego dam does not hold back all of it. Some overflows, stands under it or escapes at the sides to reach the last level — the *super-ego.* This is composed of monitions and adjurations which constitute the individual's sense of rightness and fitness. They are deemed gratuitous impositions which coalesce with the ego to form the conscience, a welter of precepts, maxims and prohibitions of fearsome and menacing mien to which the self is inclined to yield a grudging, because tepidly conceded as justifiable, allegiance. In it there is a touch of awe, of reverence and of reasonableness inspired by the firm belief in the omnipotence and omniscience of the parents who formulated these bewildering "Don'ts."

Now, the energy imprisoned in the unconscious is still pressing the libido forward to the uttermost limits of wish-fulfillment. Some of these wishes are flagrantly anti-social. The libidinal stream which carries them is forcibly deflected back into the unconscious; they become repressed. Others are detoured to socially approved channels to reach objectives which assure the self a modified but libidinous gratification which partially mitigates the agitation at the energy source. This substitution is known as *sublimation.* Still others never reach a stage of consummation consonant with superior adult standards. The libidinal energy manifests itself in infantile behavior; it remains at a level of arrested development called *fixation.*

The violently deflected stream may stop short of the unconscious. It is then said to have regressed. That energy which had violently recoiled from the censor goes to swell the unruly energy in the cauldron of the unconscious. There it rages in turbulent waves of complexes, lawless nuclei of energy erupting geyser-like in capricious or neurotic behavior or in phantasy and dream life. When these make their appearance overtly during the waking hours, their entry is felt as unlawful; their burglarious dereliction is discovered by the censor, and the culprits are forcibly ejected. Some complexes exhibit a still more irrational, and to some Freudians, a more sinister aspect.

So ingrained is parent's faith in the unforced and spontaneous benevolence of their offspring towards them, and so positive are they that the spectre of sex never stalks children's minds that Freud's disclosure of the Oedipus complex has evoked a feeling of acute revulsion. With characteristic bluntness, he has elevated it to a position of eminence in the society of complexes. He claims that children's regard for parents, particularly of the sex opposite that of the child, has specifically sexual reference; that such a parent is envisaged in the light of a lover for whom the child evinces amorous proclivities; and that the normal child, inhibited by the rigorous taboo against the incestuous alliance, learns to transfer its affections to some other person, and finally by irradiation transmutes it into love for humanity.

FREUD'S EXPANSION OF THE ID CONCEPT

While exploring man's varied loves and hates, Freud observed the recurrence of reaction patterns which led him to postulate the existence of two basic urges — destructive and preservative tendencies. They may be called *Eros* or the "life instinct," and *Thanatos* or *Arakne*, the "death instinct." The former converts man into a builder, a preserver of both self and race; the latter impels him to destroy and to turn aggressively upon himself and upon others. Suicide and all manifestations of masochism (self-punition) derive from the death instinct. So do homicide, war, and that complex of aggressions known as the sadistic impulse. Love in all its sexual connotations springs from the life instinct. These instincts are neither distinct nor mutually exclusive; each permeates the other so that aggressive components are to be found even in the purest manifestations of love.

The sadist achieves satisfaction of the erotic impulses by the infliction of pain upon the love object and the masochist gratifies the same impulses by suffering pain. Nevertheless, the life instinct and the death instinct sustain to each other the relation of polarity in that they are mutually opposed to each other. The ascendancy of either one spells life or death for the individual.

These instincts operate alongside the sex urge. Sex is envisaged as a component of the life instinct; hate and anger, as that of the death instinct. Thus Freud cuts away the ground from under his critics who claim that in the Freudian psychology sex is everything. Repression is directed not only against the sex urge but also against the homicidal tendencies of the death instinct. In either case repression must stop short of destroying the individual. He must be vouchsafed the opportunity to gratify the life instinct by providing food, shelter and the release of the sexual urge in ways that are socially acceptable. Otherwise frustration with its train of neurotic manifestations may fortify the death instinct.

The workings of the death instinct has been depicted by Karl A. Menninger in a book appositely entitled "Man Against Himself." He describes life as a struggle between the two urges, eventuating in the normal person in an equilibrium whose stability is readily upset when new problems arise to plague him. Such an equilibrium is attained through the instrumentality of the mechanism of erotization. By erotization is meant the interpenetration of the two instincts so that love conquers hate and the hateful objects are invested with benignity. It is the Great Compromiser exerting itself to effect a workable balance between the Reality Principle and the Pleasure Principle.

The Death Instinct and Suicide: Man wars upon himself in various ways. Frustration activates the death instinct to unleash its destructiveness in the form of suicide, chronic suicide, focal suicide and organic suicide.

In suicide, destruction is complete. Its causes are to be found in man himself and not in fate or in nature. It is to be attributed to the death instinct. Its destructiveness is mitigated through contact with others. It thus becomes extraverted. So does the erotic instinct. Both fuse in an external investment of its energies and so neutralize each other. When such fusion is obstructed or when "defusion" takes place, both instincts are deflected towards the individual. However, the constructive impulses must exceed in potency the destructive impulses. Otherwise the destructive tendencies operate with disastrous effects.

Often neutralization of the death instinct is not effective. Then the destructive impulses stop short of crystallization or suicidal tendencies but manifest themselves in "chronic suicide." Martyrdom, neurotic invalidism, alcohol addiction, anti-social behavior, and psychosis are examples of forms of self-destruction which wear the aspect of chronic suicide.

In chronic suicide, "the destructive activity although attenuated in time is still generalized in its focus." It persists through long periods and does not concentrate upon the body. In focal suicide, a limited part of the body becomes the theatre of the destructive energies. Examples of focal suicide are self-mutilation, malingering, purposive accidents, and impotence and frigidity. All of these types of focal suicide display evidence of self-punition in which the death instinct has not attained to full dominance. Its virulence has been measurably neutralized by the life instinct to the extent of ensuring the continuance of life. That the desire to keep on living is a factor in focal suicide is evidenced by the refusal of the ego to accept responsibility for self-destruction. In purposive accidents the suicidal motive is transferred to the super-ego, *i. e.*, to external agencies. The following news items makes this clear:

"In Detroit, Mich., Mrs. John Kulcnizki said to John Kulcnizki: 'I wish you would go out and have an accident!' He was run over and lost a foot. Then Mrs. Kulcnizki said to Mr. Kulcnizki: 'I wish you'd lose the other foot.' He did. To stop Mrs. Kulcnizki from wishing a third wish, John Kulcnizki is seeking a divorce."

This man was evidently a victim of purposive accidents. He was driven to self-destruction but resorted to the evasion of a malevolent will to placate the erotic ego. He therefore sought a divorce to rid himself of the self-destructive impulses.

PSYCHIC FACTORS OF DISEASE

The catalogue of complete and partial self-destructive practices does not exhaust the reservoir of the death instinct. The psychological factor in disease is at the root of the conversion mechanism by which the aggressiveness aroused by unresolved conflicts turns inward and manifests itself in physical symptoms. In virulent conflicts organ deterioration, comparable to bodily derangements, takes place. In Menninger's thesis, this phenomenon belongs to the constellation of the self-destructive tendencies, enumerated above. Only in this instance they converge upon bodiy organs. "Organic suicide" is the term he applies.

The exact mechanism at work in psychologically conditioned disease is still shrouded in mystery. But George Groddeck and Smith Ely Jeliffe offer the explanation: Deep insistent cravings set off "endogeneous stimuli" and are transmitted to organs and to muscles. They activate hormones or nerve fibers. These impulses, fed by the purpose of self-destruction, are conveyed through the autonomic nervous system and carried out through the non-striated musculature. The voluntary nervous system conducts them to striated musculature also. As a consequence organ injury is produced.

Psychiatrists have often called attention to the psychological component of disease. They have pointed out time and again that even organic diseases like a boil may have psychological roots. Physicians are wont to treat it in terms of bacterial flora, mechanical complications, the blood sugar concentration, the leukocytes, the antigens or the hydrogen-ion concentration in the blood. They address themselves to the skin distention, the fever, and the pain and proceed to provide relief. But psychiatrists insist that there is a "psychology of the boil." Menninger cites the case of a married woman who could not overcome an active aversion to her husband's relatives. Upon the occasions of her mother-in-law's protracted visit she developed "an outbreak of frightful boils which resisted all treatment." The attacks recurred whenever her mother-in-law came, and completely subsided with her departure. While preparing for another such visit, she suffered a "nervous breakdown" accompanied by severe sciatica.

In all these manifestations of the destructive instinct, the individual is bent upon self-destruction. Whether complete or partial depends upon the depth of conflicts and the strength of the neutralizing erotic instinct. The possibility that coincidence is a factor must not be discounted. Yet, the Freudian explanation has gone beyond a pure hypothesis. Clinical evidence is multiplying apace and the psychoanalytic probe is revealing the presence of a psychological cause at the heart of many diseases. The destructive component of neurotic behavior is being accorded increasing recognition.

FREUD FORMULATES THE STAGES AND DYNAMISMS OF PERSONALITY DEVELOPMENT

(1) Stages of Personality Development: The classical psychologists stressed character and defined it roughly as a disciplined will powered by a trained intelligence. The developmental aspects of character were envisioned in terms of traits, such as honesty, and their emergence and evolution. Their successors under various labels have transmuted this conglomerate of character traits into a unitary concept, personality, of which character is an essential sub-unit. The growth of this personality is evidenced by an increased maturity, both intellectual and emotional, and by the degree of mastery attained by the higher self over the lower self of unruly and warring instincts. Maturity is regarded from a temporal point of view; chronology delimits its stages. Self-mastery is viewed as the ability to establish a line of demarcation between the domain of the inviolate and incompatible individuality and the sphere of the socially exigent and socially desirable.

These developmental stages are (1) Infancy, (2) Childhood, (3) Adolescence, (4) Adulthood. Infancy is variously limited as from birth to the age of six, or from birth to the age of four. Childhood embraces the period between the ages of six or four and twelve. Some psychologists insist on prolonging this phase to the age of fourteen and calling it the pre-pubertal stage. Others make a more indeterminate division and designate as the adolescent period the span between the ages of twelve and eighteen, often with an upper limit of sixteen.

For Freud and his followers, personality is a many-sided normality whose facets include such aptitudes as: (1) The hardiness to come to grips with the immediate reality, to give battle to the environmental forces so as to ensure untrammeled libidinal satisfaction without taking recourse to anti-social conduct; (2) the buoyancy of spirit that can withstand life's assaults upon one's individuality unblemished by rancor, mental turmoil or frustration. Since the environmental forces make themselves felt from infancy onward, and since psychic resiliency is both a constitutional and acquired characteristic of the libidinal urges, the stages of personality development take on an environmentally conditioned complexion.

Freud employs progressive biologic adjustability as a demarcating principle, though the chronological factor is implicit in it. The developmental element is character, and its expansion involves adjustment on the planes of temperament and sociality. Furthermore, character is not envisaged as an idealistic structure, an amalgam of religious, ethical and sociological attitudes fused by the heat of reason and set over against the practical behavior dictated by necessity, prudence and expediency. It is rather in the nature of a bundle of habits formed as a result of the individual's reaction to environmental forces. Such forces are personified successively in parents, immediate members of the family, teachers, and one's social group. Their impact upon the growing child leaves a definite impress on his behavior. The quality of the resulting reactions depends upon the strength and plasticity of the constitutional factors operating as instinctive urges, the *id,* as well as upon the degree and extent of the repressive measures instituted by parents in the exercise of parental authority.

Oral and Anal Stages: So decisive for character building is this repressive force deriving from parental authority, that Freud is disposed to credit parents with the laying of the foundations of adult behavior during the first five years of the child's existence. This period corresponds roughly to two adjustive levels, the oral stage and the anal stage. The oral stage is the period preceding weaning. What this phase impresses upon the infant is his utter dependence on his mother for food and care. The ministrations of the mother may be affectionate or indulgent, indifferent or hostile. The attentive mother may create in the child a desire for self-indulgence coupled with an aversion to exerting himself. The ever-present mother's breast may become a symbol of a benevolent reality. On the other hand the dependence on the "bottle," a too brief nursing period, or an indifferent mother, may embitter the child to the extent of engendering an ever-deepening attitude of futility and frustration.

The reactions to such modes of treatment may be transitory or permanent, depending upon subsequent mitigating experiences and upon the effectiveness with which the *ego* has succeeded in repressing the memory of them. Failing such disposition, these reactions become crystallized into patterns whose dynamism continues to motivate adult behavior. They develop into oral traits: the self-indulgent, self-centered individual, the narcisistic type, perpetuating the ease and contentment and domineering attitude of the child nurtured by an over-solicitous mother; the dissatisfied, disgruntled and frustrated adult, harkening back to the period in which life was made unattractive and precarious by an unfeeling mother.

The oral stage is followed by the anal stage. While in the oral stage the possible reaction patterns are few, in the anal stage they are more comprehensive. They embrace the child's reactions to those parental demands that flow from a process of enforced socialization. The child finds himself under constant pressure to comport himself in harmony with social conventions. It is a time of constraints, of prohibitions consolidated into codes of behavior which to the child appear as a welter of "Don'ts" and "Do's." The objective to which these tend is the ability to take food and to keep clean. The latter has been designated by Ferenczi as "sphincter morale." For the child, it constitutes a new set of habits that are neither in harmony with his biologic needs nor with his primitive logic. It looms up as one of a series of arbitrary demands and practices which his world of domineering adults imposes in the name of that mythical behavior comprehended under "'good manners" or "nice-naughty."

The psychic residuum that compliance or non-compliance with these exactions leaves in both the conscious and unconscious, depends upon the child's relations with his parents. If they are pleasant and affectionate then the habits are learned with alacrity and above all, without painful resistance. Moreover, the friendly relations help facilitate and further the process of identification — a process conducive to the supposed formation of an ingratiating super-ego. On the other hand should parental authority employ coercive methods to bring about proper sphincter control, then the child may yield with feigned submissiveness or show open aggressiveness. Whether the reaction is one of smoldering hostility or ebullient resentment, the short and long range effects upon character formation are equally disastrous. The resentment engendered by the application of harsh disciplinary measures may cause the child to attach emotional values to the functions of the bowels because facilitating or hindering these functions had become a means of thwarting or propitiating parental authority. "Reaction-formations" is what Freud calls such obstructive patterns.

The Stage of Oedipus Conflict: Following the anal stage, the third developmental period is one during which the child lays the foundation for that whole constellation of attitudes which form the basis for the socialization of relationships between the opposite sexes. Crucial in these relationships are the individual's enlightened awareness of sex as a slowly emerging biologic urge of mounting intensity, its conflict with the Reality Principle embodied in sexual morality and the transference of the sexual interest in the parent of the opposite sex to a love object outside the family circle. The engrossing pre-occupation with sex creates secondary problems arising from the reciprocal reactions of the id, the ego and the super-ego. Thus to the distressing restlessness formed by an importuning libidinal drive, is added the bafflement, resentment, and hate engendered by obstructive social taboos. These nuclei of restlessness coalesce to form what

Freud considers the individual's battlefront in the struggle with reality. It first assumes the form of a complex, the Oedipus complex. It represents a first step in the child's progress towards the socialization of the sexual libido in that the parent of the opposite sex is singled out for the gratification of the sexual urge. The child is made to rue such choice under the admonitions of the super-ego and the displeasure of the power that enforces its mandates, the censor. There ensues a bitter conflict, fought now in the light of reason, now in the twilight of remorse, and most devastatingly in the darkness of vague anxiety. Often another element subversive to peace of mind becomes embroiled with the Oedipus complex. Masturbation is sometimes resorted to as a way out of the incestuous Oedipus impasse and another source of discontent is added.

However, the area of psychic disturbance may be measurably restricted and its unsettling effect upon the mind considerably minimized by wise and understanding treatment by parents. The Oedipus fixation may be attenuated as parental object-love, a love in which sex acts as catalytic agent and serves as a liberator of the stream of affection and tenderness bound up with sexuality. But the failure to achieve a dissolution of the Oedipus complex may be direful in its effects. In the case of a boy, the Oedipus conflict pushes him slowly and irretrievably into an embattled state of rivalry with his father, and the hate engendered thereby issues in such anti-social attitudes as intractibility, willfulness, truculence and contempt of all authority.

The Oedipus episode is central in Freud's conception of character formation owing to its persistence as revealed in analysis and to the directive force it exerts upon the libidinal drive. It may cause the individual to face social demands in a spirit of coöperation or of antagonism; it may help to build a philosophy of life founded on good-will or one marked by suspicion and distrust. The attitudes toward people in general is determined by the child's relations to the parents, as they represent to him all the attributes of reality. Their judicious reaction to inter-family problems and less tangible attitudes flowing from the stream of sexuality, churned into whirling eddies by the Oedipus storm, help to build a reasonable and benign super-ego that looks upon the id strivings as worthy of some recognition, as deserving of gratification on a level of fulfillment that does not do violence to the instincts or to the social conscience. It is just such a consummation that Freud promises for a society that will frankly recognize the implications of his psychology of the Unconscious.

2. Dynamisms of Personality Development: The consideration of the stages of personality development has yielded information about enduring dispositions into whose make-up instinctive trends and environmental influences have entered as determining factors. They constitute the woof and warp. The actual weaving is performed by mechanisms or dynamisms, transformation of psychical energy mediating between the id strivings, the super-ego's collaboration and the ego's concurrence. Their specific functions are many: some act as shock absorbers in the clash between the Reality Principle and the Pleasure Principle; a few act as traffic lights signalling the speed and direction in which the libidinal forces should move; others serve as anaesthetizing agents to lessen the pain of violent conflicts.

(*a*) *Introjection:* The poet Holmes sings of one form of introjection when he writes, "I am a part of all that I have met." He refers to the assimilation of environmental elements, both physical and spiritual, into one's outook upon life. It also expresses itself as the power to abstract attitudes and habits from loved ones by a process of identification, in which the qualities the child approves in them is articulated into its own personality make-up. As the identification becomes more complete, it may bring in its wake a merging of personalities to the extent that often obtains in the close intimacies that bind parents and children.

Under favorable conditions of personality development, introjection, working through identification, furthers the expansion of the super-ego because its teachings, reflecting as they do the will of a loved one, are accepted with little or no resistance. Thus the *Ego forces* learn to acquire control over the *Id desires.* Under such circumstances, fundamental reaction patterns that make for social adjustment are built in rapidly and durably. However, given an unfavorable human environment, introjection serves but to foster neurotic patterns of behavior.

(*b*) *Repression:* When the id strivings impel the individuals to behave in ways frowned upon by the super-ego, or disapproved by the ego, the conscious represses the unruly desires into the unconscious. This procedure proves to be but an expedient, for the repressed thoughts, far from being definitely "liquidated," continue to plague the individual in the devious ways devised by the insidious machinations of the unconscious. Their subterranean activity sets up tensions which the individual seeks to resolve with the aid of dubious reaction-formations, or defensive-offensive psychic weapons.

In its milder forms, repression may be likened in its workings to the manipulations of the magician. The coin of the objectionable desire just disappears when the conscious waves the wand of disapprobation. It may also operate slowly and fitfully, as when a habit like drinking a bottle, having become inveterate through practice, is suddenly given up as a result of continuing repression, exerted with unequal force, over a period of weeks or even months. The explanation is that the undesirable habit had been displaced by a more desirable one; or the entire outlook upon life had been altered by new orientations so that the tides of life swept past it, leaving it isolated and cut off from its vitalizing energies. This, however, is not the sense in which Freud employs the term repression. Freudian repression is unconscious while the submerged or atrophied habits are victims of a conscious process. The latter may be spoken of as "repression." But the word "suppression" would best describe the conscious elimination of thoughts and habits that reflective thinking has condemned to extinction.

(*c*) *Transference:* This term is used to describe a mechanism which operates in two distinct life situations, the developmental and the therapeutical. Transference as a growth dynamism serves to canalize the libido away from the self towards human "objects" in the environment. Freud speaks of them as "love-objects." Failing to attain this normal destination, the libido may be turned back towards the self to supply the energy for the narcissistic propensity. By means of transference, the individual learns to either build his philosophy of life around his affections, thus accenting human relationships; or he may find himself under compulsion to lean upon himself egocentrically. Here, again, the Freudian emphasis upon parent-child relationship is apparent. Parental attitudes crystallize in the child those love-patterns that by progressive transference become oriented first to parents rather than to other people in the child's environment. Understanding parents are able to approach the problem of child nurture in a spirit of affectionate objectivity unblemished either by over-possessiveness or by a tepid emotionalism. This attitude is likely to arouse in the child a correspondingly objective pattern of behavior that may serve as a bridge between the world of parents and that of people in general. It may save him from the fate of those who, caught in the coils of an overpowering and isolating parental affection, suffer a fixation of love-energy upon parents. When such fixation obstructs the process of socialization to the extent of impairing the capacity to make new friendships, Freud employs transference as a therapeutic mechanism. It is designed to turn the libido back into the normal channels of sociality. It's therapeutic effect is wrought by the psycho-analyst who, in the act of psychoanalysis, strives to win over the confidence of the patient. He seeks that confidence in order to win from the patient acquiescence in the re-routing of the libido from the bypath in which it had become bogged down to the broad highway of human contacts. The analyst acts as if he had asked and obtained permission to take the wheel of a car whose driver had grown confused in the world's maze of traffic.

(*d*) *Sublimation:* The process of socialization is one of transformation of the biologic urges operating as instruments of gratification and fulfillment. They function under sanctions promulgated by nature with sole regard for the preservation of the race and of the individual in so far as he promotes its welfare. Since, in the history of the human race, preservation has been conditioned by man's ability to overcome the inclement forces of nature, those human traits and attitudes that have aided man in this struggle have attained a high degree of efficiency and organization. Slowly and painfully mankind has learned to exercise selectivity in the development of these preservative and adaptive traits by incorporating them into the genes. Heredity has passed them on from generation to generation until they have become fixed as instincts or instinctive tendencies. Unfortunately for civilization, the partial conquest of natural forces was achieved so late in the history of the race that the offensive and defensive biologic weapons, embodied in the instinctive urges, had already become standard equipment for every new-born child. Nature, ever skeptical of human achievement, is slow in modifying them, and prefers to trust in time-tried instruments.

Therefore, it has been mankind's task to mitigate the aggressiveness of the biologic man so as to enable him to enjoy the fruits of a civilization that is putting a premium on unaggresive behavior. In the language of Freud, that portion of Reality which is man-made and built upon specifications evolved by the forces of civilization is in conflict with the in-dwelling, self-regarding tendencies which served man admirably in his primitive state. This conflict has made little or no impress upon the biologic man. Nevertheless nature, ever avid for furthering the life principle, has hit upon a compromise by which the biologic urges, while abating not a jot from their self-regarding aims, have achieved a measure of adaptation by resorting to sublimation. By means of sublimation the instinctive urges are translated into an actuality from which most marks of an anti-social nature have been erased. The narcissistic tendency to self-love may manifest itself in some individuals in behavior epitomized in the judgment, "He loves to show off." But the "show off" may win the limelight of public adulation as an actor by superb acting.

Freud, however, empoys the term "sublimation" to describe the re-routing of the sexual impulses from purely sexual activities to their socializing concomitants, such as affection, friendship, love of family and of children. When uninhibited by untoward experiences, the sexual impulses may be so refined as to irradiate to all of an individual's social relationships and to become crystallized in an all-embracing love of humanity. Freud's emphasis on the sexual drive does not, however, preclude a keen awareness of the rôle played by sublimation in socializing other instinctive drives. Besides, the connotations that Freudians attach to the sexual impulses are wide enough to bring within the boundaries of that concept all the major instincts whose effective sublimation has advanced our civilization.

Introjection, repression, transference and sublimation are primarily adaptive dynamisms designed to harmonize the id strivings with the ego and super-ego aspirations. Such harmony attends the successful manipulation of the instinctual urges in conformity with the exactions of society. Their purpose is to effect a livable reconciliation between the anti-social individual and the socialized group bent on moulding him to their desires. Unfortunately, complete reconciliation has not been possible and therefore discord reigns in the relation between the individual and society. The individual is not entirely blameless but society is equally culpable by failing to facilitate the activity of the aforementioned dynamisms. Parents have been remiss in their treatment of their children, substituting caprice for wisdom, rule-of-thumb for understanding, authority for a thinking-love. Society has been just as blameworthy in its blundering acceptance of a reality which combines the worst features of the jungle with the ineffectual strivings of a nebulous utopianism. The individual is caught up in the swift and treacherous current of life; before he has learned to swim and before he can make effective use of the life preservers provided by introjection, repression, transference, or sublimation, he is completely submerged.

But he does not perish. He saves himself by the use of life-saving devices of his own making — devices fabricated by the normal as well as the neurotic individual. They are psychic mechanisms fashioned less for adaptive than for defensive purposes. The most important of these are:

(*a*) *Projection:* Projection is a psychologic "alibi" invoked under circumstances that threaten the integrity of the ego. Instead of frankly admitting one's errors, or poor judgment, and suffering thereby a diminution of self-esteem, the individual has recourse to a species of self-exoneration. He places the blame for his failures, weaknesses, or meanesses upon external agents like designing competitors, conniving friends; he may even throw over them the cloak of anonymity by referring to these obstructionists as "people"; even a mystical "fate" or "nature" may be named as the subversive agencies.

It may be stated that the "face saving" devices which projection invents are not necessarily neurotic in their tendencies. They are but insulating contrivances designed to keep one's ego at the maximum of inflation against the atmospheric pressure exerted by a mortifying environment. Reason may minimize its effectiveness, reflection may deprecate its use, yet reality often proves so intractable that the very reason which condemns projection as an undignified retreat into infantilism, stands aghast at the stupidities that masquerade under the name of civilization. But reasonable or no, projection appears to be a universal trait. It is not confined to any specific developmental age, though children probably make greater use of it than adults.

(*b*) *Conversion:* It is not recorded whether Shakespeare's schoolboy who went "unwillingly to school" merely translated this "unwillingness" into a mood of obnoxious reluctance. He might have translated his distaste for school into a physical symptom sufficiently distressing to keep him in bed. He could have done so if the distressful situation were to enlist the aid of the unconscious. Such aid could have been extended by a process of conversion in which the distress, which at the conscious level is an emotionally charged idea, may be transmuted in the unconscious into a physical symptom such as a splitting headache, an attack of indigestion, or some other equally incapacitating affliction.

This dynamism is very common both among normal people and among neurotics. The normal person develops a "convenient" indisposition in the face of a distasteful task. The indisposition is real in the sense that the distress is actually felt. But while the normal person is dimly conscious of its purposiveness, the neurotic is not. Moreover, the severity of the attack is greater in the neurotic. The "blinding headache" that serves to break an unwelcome engagement may, in the case of the neurotic, become intensified into actual blindness. Furthermore, these bodily symptoms are the neurotic's way of inhibiting actions contemplated by the conscious in defiance of the moralizing super-ego. A psychiatrist described a case of a patient whose hands had remained rigidly contracted for months. Psycho-analytic insight prompted the psychiatrist to ask "Whom did you wish to injure?" Analysis revealed that the patient had experienced a strong desire to choke her husband. Conversion here had served the purpose of compliance with the tenets of social morality by rendering the patient incapable of obeying the murderous impulse.

(*c*) *Rationalization:* The individual's conduct falls under the scrutiny of two "censors," emotion and reason. Each one employs a different touch-stone of adequacy. The emotions grant approval to behavior which satisfies those instinctual drives which help an individual's self-aggrandizement. Since this aim is frankly selfish, gratification at the instinctual level is marked by cruelty, stupidity, caprice and petty meanness. But the individual's dawning conscience, energized by education and experience, heaps reproach upon behavior which, viewed by others from their own purely personal angle, is apt to run afoul of their own selfish designs. Lacking the candor which avows that "what is sauce for the goose is sauce for the gander," the individual seeks to attenuate its impact upon him, by invoking the participation of another "censor," reason. Not "reason" in the formal logical signification; rather is the meaning best rendered by "reasonableness." Behavior is characterized as "reasonable" when (1) it does not serve to circumscribe too narrowly the scope of activity of others; (2) when its self-regarding content is not too conspicuously egoistic and (3) when it is an expression of an ideal consecrated to an adequate sublimation of the ego instincts.

The intensive cultivation of the faculty of reason has been advocated as a balance wheel to the anarchic surge of the emotions. It was thought that reason would be exempt from the weakness of caprice, whims, and transitoriness of instinct-dominated behavior. However, the id forces have asserted their superiority as incentives to action; they have succeeded in perverting reason to aid selfish desires. The perversion takes the form of investing emotionalized behavior with an atmosphere of reasonableness by calling upon reason to bear witness to its inherent reasonableness. This is the essence of rationalization. Man's pride and vanity demand that he order his life on a rational basis. Life, in its entanglement with natural forces and with the tempestuous impulses, finds itself possessed by forces for which mankind has not been able to devise effective controls. But reason demands that it be served. Rationalization is the answer. It saves man's pride and places none too effective brakes upon his dominant impulses. By means of this dynamism even flagrantly impulsive behavior may be surrounded by an aura of reasonableness thus serving to regularize the irregular and to rationalize the irrational.

(*d*) *Reaction-formations:* When the unconscious clamps down the lid upon the troublesome id strivings it makes use of repression. When the lid is consciously riveted upon the "undesirables" of the psychic underworld, the mind makes use of the mechanism known as a reaction-formation. It is a defensive dynamism, called into requisition to maintain a semblance, at least, of ego integrity in the face of the ravages of poorly controlled id impulses. The individual who is hard put to it to control his cruel impulses may learn to mask them in the guise of wit, clever enough to arouse admiration and mordant enough to feed the sadistic urge. The person who finds it hard to control the acquisitive impulse may become over-scrupulous in his financial dealings; so much so that his honesty is constantly alluded to in terms of self-glorification. Such an individual may reasonably merit the reproach of "protesting too much." Translated into psychologic terms, it means that his honesty is being achieved at the cost of a terrific struggle with his refractory acquisitiveness. Again, the exaggerated and meretricious cleanliness of many adults may be reaction-formation to the unsuccessful attempts to achieve cleanliness during infancy. Such persons may become "nasty-nice"; or they may develop a painful meticulousness in matters of personal hygiene, often making utter nuisances of themselves.

The Freudian concept of personality development stresses the paramountcy of impulses, their sublimation and the adaptive defensive dynamisms that eke out the deficiencies of sublimation. The normal personality is one which has succeeded in bringing instinctive drives into close rapport with the dominant realities of life without capitulation and without frustration. Since individuals vary both in the strength of their instinctive endowments and in the type of constraint imposed upon them by their environment, it is difficult to see how the Freudians can be more specific in defining normality. This disability they share with all other schools of psychology.

THE NEUROTIC PERSONALITY

In the pre-Freudian era of psychiatry, what is now known as neurosis was a condition ascribable to spinal irritation or anemia of the brain. Even Janet, who hit upon the hypothesis that unconscious ideas were at the root of neurosis, still maintained that the causative factor is a state of dissociation produced by an innate weakness of the brain and has no meaning as a symptom of maladjustment. It is Freud who is accredited with the thesis that neurosis is a purely functional disorder self-inflicted unconsciously by the victim in order to escape the intolerable situations created by ruthless and uncompromising reality. It does not matter whether others regard these situations in the same unfavorable light. It is the individual who is the sole judge; and he is not disposed to seek the counsel of others. It is to the bar of his ego that he summons the recalcitrant situation and, acting both as judge and jury, pronounces sentence. But it is the unconscious that carries out the sentence. It offers the ego surcease from its distress by anaesthetizing the individual against the abrasive power of reality. But like all anaesthetics, its effects soon pass away to be succeeded by a recurrence of the pain in the form of neurotic symptoms. These symptoms are self-defensive and assume the forms of hysteria, obsession and anxiety. According to Freud, the hysterical symptoms are bound up with the Oedipus situation. The hysterical attack is a symbolic consummation of the Oedipus wishes, while hysterical anaesthesia is an expression of intense inhibition of Oedipus desires. In anxiety, the ego is bedeviled by the monitions of the super-ego over the gulf that separates the individual's adjustive achievements from the potentialities of the idealized self. This disparity breeds a sense of guilt. So universal is this feeling of guilt that it has led many to postulate original sin and the innate depravity of human nature. In obsessional fears, the individual's sense of guilt is coupled with an imperious need for punishment. This punishment is self-inflicted through the neurotic symptom. In all these neurotic manifestations, the meaning is latent and only through analysis does it become manifest.

Obsession Neurosis: No neurosis so fully exemplifies the Freudian conception of misdirected libido as the obsession-neurosis. It also reënforces the Freudian dictum that the neurotic symptom, be it ever so simple, expresses ever so many motives and tendencies. All these motives and tendencies spring from the developmental configurations in which parental relations are the field forces. In early life, the child has to become adjusted to parental authority as dictators of "anal" behavior. Overstrictness in implanting habits of physical cleanliness may engender a habit of over-cleanliness which may gather strength through the years and develop into ritualistic formulae such as excessive handwashing or the careful disposition of clothing as a preparation for sleep. Parents, again, enter the clinical picture as the generators of the emotion of hatred and its counterpart, rebellious self-assertion. This anti-parental feeling is directed: (1) against the parents as embodiments of an arbitrary restraining force, (2) against the parent of the opposite sex as the hated rival in a rapidly developing Oedipus situation.

There is the case of the business man who did a lot of traveling by train. But instead of guiding himself by the time-table, he finished whatever task he was engaged in and then proceeded to the station to wait for the next train. When twitted about the time wasted, he explained that he refused to subordinate his movements to regulations of the railroad company. Analysis, however, revealed that this man's contempt for time-schedules was an unconscious reaction against his father's exactions as regards punctuality. His conscious resentment against his father had been repressed as an unfilial act but the feeling of resentment found release by displacing it to an equally exacting railway company. Since such antipathy can easily be rationalized as a sort of declaration of independence, and since this peculiar habit would pass for nothing more aberrant than an eccentricity, he was enabled to give free rein to his accumulated resentment without suffering a diminution of self-esteem. More often, rebellion against the father springs from the sexual preoccupations that culminate in an unresolved Oedipus complex. The animus borne the father is provoked less by his exercise of strict discipline than by the sexual implications that flow from the Oedipus entanglements.

The Oedipus is not always discernible in its clear outline but the sexual nexus is clear to all Freudians. Even in unreasoning fears or phobias, the sexual element is predicated. Thus the victim of the excessive fear of storms was found upon analysis to be suffering from the effects of a suppressed memory of an unfortunate sex experience with which impetuosity and violence had been associated. The resulting phobia was directed against the storm, a symbol of "nature," especially man's nature. A storm seemed a signal to the unconscious to revive the emotional upheaval that formerly attended the repressed experience.

THE PSYCHOTIC PERSONALITY

Behavior as synthesized in personality is a reflection of the individual's composite inner desire. Its component elements are:

(1) The sexual drive.

(2) The ego as a product of experience especially during infancy and childhood.

Experience has a qualitative and quantitative aspect; its qualitative aspect determines the character of the experience, whether favorable or adverse to the normal libidinal development; its quantitative aspect is decisive in furnishing the individual a multiplicity of outlets for the facile canalization of the libido. The ego, assisted by the super-ego, constitute the synthesizing agencies. An adequate synthesis of behavior traits tends to harmonize the libidinal strivings with the exactions of the environmentally conditioned super-ego. The harmonizing is performed by the ego. Faulty collaboration, whether chargeable to a weak ego, an explosive id, or a ruthless super-ego, tends to destroy the harmony. A lack of harmony is signalized by a cleavage between the individual and the world in which he lives. If the extent of the cleavage does not preclude the ability to orient the individual in his surroundings in a manner calculated to maintain his position in society, disintegration of the psyche may have set in, but at its worst it is of the nature of a neurosis. But when disharmony has so deepened and widened the cleavage as to make it difficult for the individual to remain in contact with reality, the resulting personality disruption is characterized as a psychosis.

There are points of similarity and dissimilarity between the neurotic and psychotic personalities. Both are suffering from maladjustment which expresses itself (1) in anxiety rooted in the Oedipus situation and its concomitants; (2) in attempts to rebuild ever crumbling defenses against the violent assaults of the id; and (3) in a futile endeavor to strengthen the repressive powers of the ego and super-ego. In contrast with the neurotic, the psychotic has made an abject surrender to the id by relinquishing to it the direction of his life. Now the id strivings enjoy the largest measure of free play during childhood when the restrictions of social living little hamper the gratification of biologic urges; when the id little feels the fetters forged by the ego and super-ego, the twin jailers of the id desires. From the point of view of socialization, the reversion to primitiveness is in the nature of a retreat. Regression is the Freudian description of this relapse.

The capitulation to the id forces results in the elaboration of patterns of behavior which, in the considered judgment of society, are characterized as insane. The pattern exhibits many variations:

(1) the Schizophrenic.
(2) the Paranoiac.
(3) the Manic Depressive.

In schizophrenia, the personality is split, but both antithetic types of personality are harbored in the same individual. The Queen of England may rub elbows with a scrub woman in the disordered mind of Mrs. Jones and both comport themselves as befits their contrasting personalities. The symptoms of schizophrenia are enormously varied: there may be extreme excitement alternating with demobilizing depression; there are the hallucinatory variety of symptoms affecting the senses of hearing, seeing, taste or smell; these are supplemented by the delusional trends associated with unfounded beliefs about reality. One must not omit reference to a large group of schizophrenics, the sufferers from "dementia praecox," which means early or premature disintegration of mental life. The praecox patients are those who are suffering from an unnatural acceleration of the adjustive tempo, much as if a learner had practiced driving on a racing car and comes to grief when transferred to a low-powered automobile.

At the root of the schizophrenic disorders is the divorce of ego and super-ego from the id. The individual has regressed to an earlier narcissistic stage of libidinous development. Schizophrenia is characterized by egocentricity in which the boundaries between the "self" and the "not-self" are but dimly discernible though not entirey obliterated. The ego and the super-ego are merely deprived of their powers and whenever the conditions that brought about the regression disappear or weaken in potency, they resume control of the id. The occasion for this restoration is an urge to resume relations with the outer world. The schizophrenic hallucinations about snakes and worms signalize the first intimations of such desire, for snakes and worms symbolize sexual interest in love objects, the psycho-sexual force, the Freudian bridge between the id and reality.

The paranoiac, also, suffers from an unresolved conflict between the ego and the id. Only in the paranoid condition, the ego and super-ego, instead of abdicating, have simply acknowledged the sovereignty of the id by entering into its service. They deliberately ally themselves with their former opponent and bring to the partnership the systematizing and synthesizing power that works over the product of regression into a semblance of realistic behavior. Its realistic coloring is imparted by the delusions which, by rationalization and introjection, create a falsified reality more in keeping with the id wishes. The delusions that afflict the paranoiac are as bizarre and baseless as they are various. There are the patients who consider themselves great inventors or scientists; who are the victim of diabolic schemes and inhuman persecutions; who are the unfortunate victims of circumstances which point to the machinations of enemies or evil spirits. Paradoxically, they are intelligent people whose intelligence developed a blind spot that is always directly in the path of reality. They therefore view reality mentally rather than sensorially; they see what they want to see regardless of the testimony of their senses.

The third class of psychotic is found among the manic-depressive personalities. In this disordered state, the ego is alternately attacked by the id and the super-ego. When the id is victorious, the victim is highly elated, the elation symbolizing the victory of the oral-sadistic tendencies heretofore effectively repressed by the ego. The triumph of the super-ego ushers in a period of melancholia, a period of self-recrimination for having yielded to the id. Thus the manic has rid himself of the prohibitions imposed by the super-ego; the melancholic is in the throes of ruthless, sadistic self-punishment.

Just as the neurotic symptom is meaningful, so is the psychotic symptom. The difference is one of degree of rationality. For the analyst, the neurotic behavior is more readily understandable because concepts of reality, more or less complete, have been woven into the fabric of neurotic behavior. The psychotic, however, is further removed from reality. Hence, his behavior is motivated largely by the primitive logic of the unconscious, a logic which is based on biologic needs rather than on the requirements of a socialized existence. But logic apart, psychotic behavior reflects the dissatisfaction of the super-ego with the way the ego has organized the libidinal forces. So deep and complete is the Freudian pre-occupation with the discovery of the meaning behind every behavior pattern, that they have extended it to the consideration of mental disorders admittedly organic in origin. Epileptic disorders, senile dementia, paresis, taxic psychoses, are explained from the point of view of organic lesion as well as from that of the disorganization in the Id-Ego-Super-Ego combination and the symptoms are described in typically Freudian language.

THE TECHNIQUE OF PSYCHOANALYSIS

As a descriptive phrase psychoanalysis has been employed by both laymen and psychiatrists with bewildering elasticity. It describes a special method of medical treatment of certain types of nervous disorders, comprehended under the term "Psycho-neuroses." It has become differentiated into a technique for mapping the hinterland of the unconscious. Finally, it is applied to the total body of knowledge relating to the unconscious and its manifestations. It is, therefore, synonymous with the "science of the unconscious." To distinguish between the different uses the first two are referred to as the "Psychoanalytic method or technique," the last one as "Psychoanalysis."

The method has undergone many modifications instituted by practitioners who, repelled by the unsavory facts disclosed by Freud, have incorporated in the traditional system of psychotherapy the less objectionable features of Freud's psychology. Especially vigorous has been their opposition to the attribution to sex of a uniqueness denied other instincts and to the dependence on the psycho-analytic technique as the sovereign remedy in curing neuroses. Indeed, the reluctance to accept Freud's method in its entirety is shared even by accredited Freudians, though they pay homage to Freud and acknowledge their indebtedness to him.

Fundamental to all therapeutic techniques is the assumption of the reality of the unconscious. In the play of life it is always cast as the villain. It is through its Machiavellian machinations that life becomes complicated by so many tragic episodes. The part of the hero is taken by the Self who wages a ceaseless struggle for happiness. More often than not the ending is not a happy one; the Self goes down in ignominious defeat. The psychoanalyst anticipates no other ending. The Self is powerless to unmask the villain because he never acts openly. He assumes various disguises, now made up as phobia, and again masquerading as a compulsion.

Free Association: Lacking penetration, the Self appeals to the psychoanalyst to expose the villain. In the pioneering days of psychoanalysis, recourse was had to hypnosis. The individual — the Freudians speak of him as the patient — was hypnotized and by artful questioning was made to reveal the cause of the distressing symptoms. For during hypnosis, inhibitions are weakened and reticences lose their secretiveness. This was Breuer's way. But Freud found patients resistant to hypnotic suggestion and he soon hit upon another method. He argued that ideas do not exist in isolation, that they coalesce with others to form groups. These, in turn, merge with other groups, thus forming an endless associative chain extending from the upper reaches of the conscious to the lower strata of the unconscious, where they abide as forgotten memories. Moreover, these component ideas are not passive links. They are causally related to each other, each one exercising directive influence upon its fellows. He was, therefore, driven to conclude: (1) that behind every neurotic symptom there lurks a directing train of thought and (2) that instigating thought could be discovered if the patient could be induced to empty the reservoirs of his mind, talk himself out completely. Freud, therefore, invited his patient to soliloquize with utter inconsequence, to give utterance to thoughts as they emerged unstudiedly in consciousness. This was the genesis of the method of "Free Association." Like a fisherman reeling in his line, he gathers in the submerged thread of thought until the inciting thought breaks the waters of the unconscious. He is suddenly seized with an unaccountable embarrassment, his face becomes flushed and he becomes irritable and excitable. The unconscious has released a repressed thought and the doctor has uncovered a complex.

From this point onward, the psychoanalyst's task is to help the patient overcome his manifest disinclination to continue the treatment. His reluctance is understandable. For one thing he cannot allay the repugnance to discuss with anyone the conflict that had brought him to so sorry a pass. For another, he is loathe to face, to repeat, an experience that had proved so emotionally disturbing. Coming face to face with the repressed thought heretofore hidden away in deep layers of the unconscious, he is eager to avert another encounter. The psychoanalyst, therefore, brings to bear upon him all that he has of patience and persuasion. He cajoles, he wheedles, he exhorts, he commands. He exerts himself to establish a friendly *rapport* with the patient, in order to force him to relieve the emotionally surcharged experience and thereby cause the effervescence of the emotional content. This process which effects a disintegration of the complex is called *abreaction*. In its essence, it is a new name for the Aristotelian catharsis, the relieving of emotional stresses by providing for them harmless gratuitous expression. To have "a good cry," to "talk out" one's difficulties with a sympathetic listener, are naïve applications of the principle of catharsis.

Suggestion: When the complex is exposed to the patient's consciousness, the psychoanalyst concentrates on the extirpation of the neurotic symptoms and the reëducation of the patient's attitudes and habits toward the goal of normal adjustment. The therapy enters the stage of suggestion. His reliance on suggestion is variously justified by Freud and his followers. Freud maintains that the suggestible attitude is innate in human nature. The tyranny long exercised by the males of the human species has impressed it indelibly upon the race. Ferenczi traces the submissive attitude to the infantile stage of existence when the authority of the parent, particularly of the opposite sex, is paramount. When submitting to suggestion, the patient regresses to the infantile susceptibility to suggestiveness by accepting the psychoanalyst as the substitute for the favored parent. But whatever explanation of the genesis of the suggestible attitude is accepted, suggestion is a powerful force for the reëducation of the warped or perverted attitude and habits.

Interpretation of Dreams: Another avenue of approach is open. If the road to the unconscious is obstructed by insurmountable inhibitions, access to it may be had through the interpretation of dreams. The dream is the embodiment of thought processes that have evaded the intrusive censor. During the dream state the ideas range freely over the entire mental terrain, passing unchallenged from the conscious to the unconscious. They range themselves in unstable groups and sequences, thus forming thought-structures conveying intelligible meaning. The meaning, however, is significant to the psychoanalyst but is not apparent to the dreamer. He accepts the illogicalities, the whimsicalities, the distortions, and fanciful elaborations as the inevitable outcome of uncontrolled thinking. Especially oblivious is he of the presence of the import of the dream and of the vicarious nature of the episodes unfolded. What is obvious to the dreamer is the "manifest content" — the dream as recorded — and not its "latent content," the motivating thoughts. Nor is he aware of the activating agency in most dreams, the desire to enjoy imaginary gratification of frustrated wishes, the opportunity for wish-fulfillment.

It is to the elucidation of the latter that the psychoanalyst addresses himself. He analyzes the construction of the dream to discover what ideas, fears, hopes and desires had been forcibly denied overt gratification. Their banishment to the unconscious had been thorough-going enough to exclude them from consciousness during the waking state, but did not entirely preclude them from effecting surreptitious entry in the dream by means of an effective disguise. They appear as symbols of forbidden thoughts and as such are less repellent to the ever-watchful censor. Having eluded the quasi-personal critic, they enter into association with innocuous thoughts and construct the dream in order to achieve wish-fulfillment.

The interpretation of dreams consists in pointing out to the patient obvious and recondite indications of wish-fulfillment and the significance of the symbolic content. The number of things symbolically represented in a dream are the human body as a whole, parents, brothers, sisters, birth, death. The human form as a whole is typically represented as a house, parents appear as emperor and queen, children and brothers and sisters are symbolized unkindly by criminals and vermin, birth by water, death by setting out on a journey. Finally there is a most elaborate set of symbols relating to sex.

The methods of free association and dream interpretation are but preliminary steps that the psychoanalyst traverses in leading the patient to the seat of the trouble. The process is protracted for endless visits. It is not uncommon to find patients undergoing treatment for years. On the other hand, many others have testified to lasting instantaneous cures. The social stigma that once segregated the sufferer from neurotic ailments is slowly dissolving. Normal people harassed by baffling problems seek enlightenment through psychoanalysis.

CHAPTER VIII

THE FREUDIAN DISSENTIENTS

THE history of psychology, like the history of all scientific advance, is one of bellicose progression in the face of stubborn ignorance, barren skepticism, intrenched conservatism and legitimate criticism. It is therefore not surprising that an innovator like Freud should bring down upon his head all the concentrated fury and venomous attacks launched against one who threatens the stability of widely accepted systems and schools. Opposition of this nature is to be expected and need not cause excessive disquiet. Its very manifestation is an axiom of human nature. Its distrust of the new and the emotional upheavals brought about by the dissemination of theories and principles that may entail violent dislocation of settled beliefs arouses the instinct of pugnacity. But when opposition and dissatisfaction spring up within the ranks of one's co-workers, and assume the shape of separatist movements, they are not always accepted with resignation. Human nature is not so easily subdued to the amenities of scholastic decorum to the extent of repressing the emotions that cluster about one's self-esteem. When one's theories are challenged, the objective scientist as well as the subjective ego takes up the fight and the ensuing fray is apt to grow a bit messy with unaesthetic recriminations.

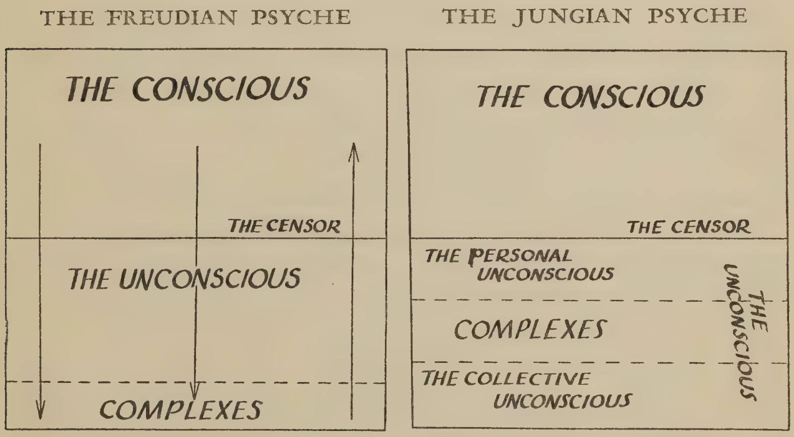
The separatist movements within the Freudian ranks are headed by former students and co-workers (Jung, Adler, and Rank.) The circumstance of former intimate affiliation is the "unkindest cut of all." "*Et tu Brute*" sounds the lowest depths of despondency. The relationships between the various factions of the Freudians have, therefore, been less than cordial. The sectarian atmosphere has also permeated the leaders and followers of the disstentient schools and extreme acerbity has characterized the inter-school strife. At times it has taken on the complexion of a protracted family squabble, the bickerings being more vociferous than destructive. Irony and sarcasm are the weapons employed, and the more caustic they are, the less effective. There is nothing more devastating than factual weapons; and nothing less effectual than personal abuse wielded in the defense of a theory or a fact.

(1) THE JUNGIAN SCHOOL

The Jungians like the other dissentients, are inherently Freudians. Their language is the same but the grammar is a bit different for each one. The founders freely acknowledge their indebtedness to Freud and draw freely upon the master's writings. But they differ widely as to their implications and ramifications. They subscribe to the essential features of Freud's metempsychology, the structure of the mind; they concur in the main in his explanation of the dynamics of the mind. Jung starts out with the concepts of the Conscious and Unconscious, their organization into the human Psyche and its interaction with Reality as personified in all the forces that constitute the individual's environment. He also accepts, with few qualifications, Freud's terminology. However, he differs from Freud widely and eloquently, as we shall see.

The Jungian structure of the mind: Whatever special name these seceders bear, they all stem from Freud's theories and are classified, therefore, as Freudians. The praise they bestow upon Freud is often motivated by a studied candor; its lack of warmth and spontaneity is apparent only in moments of truculence engendered by a spirit of contentiousness. For all its outward marks of graciousness, the undercurrent of hostility is unmistakable. The strong partisanship displayed by the followers of each school tends to envelop Freudianism in an atmosphere of controversy that is not conducive to calm reflection or open-mindedness.

The Jungians accept the classic notion of the unconscious and its active association with the conscious. They also accept, in principle, the concept of conflict engendered by the interaction between the ego and the socializing forces that tend to delimit sharply the sphere of ego activity. They reject Freud's activating principle in human adjustability, the sexually tinged libido, and deprecate the efficacy of the orthodox psychoanalytic technique. The psychology of the Jungian variety has its points of similarity with and differences from that of the orthodox Freudians. It may help to understand these better by invoking the aid of diagrams:



THE FREUDIAN PSYCHE

THE JUNGIAN PSYCHE

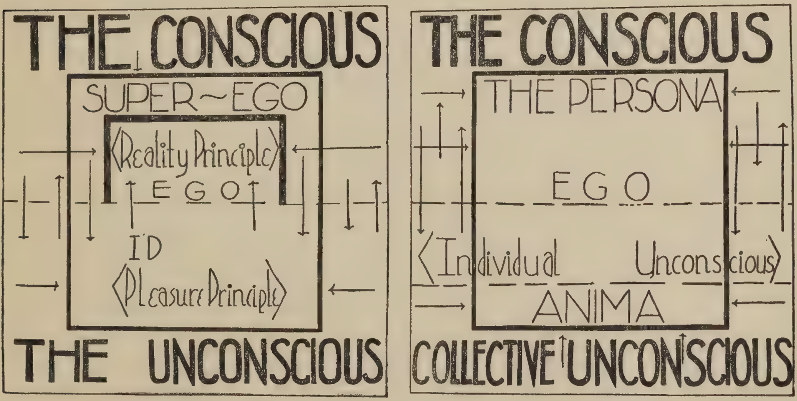
Figure 19

For Freud, the unconscious is a storehouse of instinctual urges, sexual areas infected by the Oedipus complex and memories of various stages of repressed thoughts and wishes that cannot stand the light of morality, of the temple or of the counting house — traces of painful experiences that the conscious has banished. Disparate as these psychic entities are, they are not thrown together in a helter-skelter fashion. On the contrary, they form systems, though the cohesive principle is not the logic of consistency. As far as the associations are logical, it is a crude and primitive logic obedient to the law of biologic necessity and impelled by the urgings of the amoral preservative and developmental instincts.

To this Freudian unconscious, Jung would add another compartment. He calls it the *collective unconscious;* he gives to the Freudian unconscious the name of *individual unconscious.* The collective unconscious is the inherited layer of racial memories of attitudes and reactions that mankind has acquired in the course of human evolution. While this is a quasi-Lamarkian view of the mind, its validity is not more questionable than the acceptance of the instinct doctrine. Psychologists from James to Watson have regarded some psychic urges as innate. Therefore the charge of mysticism leveled at Jung's conception of the collective unconscious may be relegated to the sphere of the controversial for, as psychology rests on a large foundation of theory, it is not wholly free from other mystical elements.

In this collective unconscious are stored the instinctive urges. Jung recognizes three; the sexual, the nutritive, and the instinct for power. All three merge into one type of psychic energy, the libido. It also constitutes a reservoir of racial dispositions , the Archetypes. They are primordeal images. Many of them are common to all races and assume the character of myths. Others are the product of the strivings of a special racial group and therefore contain individualistic elements. The objective of these strivings is the same for us as it has been for our forebears, a striving for understanding, for progress; for the conquest of ourselves and for the conquest of nature. The Archetypes are, therefore, that "of Gods and devils, saviours and criminals." They also represent attitudes useful for the preservation of the race. Such are protective and preservative emotions like fear of the dark and fear of animals. There may be no obvious rational element in them, nor fear-producing stimuli, yet they arise in full strength and may even assume the intensity of phobias.

Jung's conception of the operative aspects of the mind differs widely from that of Freud. It may prove helpful to translate both into diagramatic form:



FREUD'S CONCEPTION

JUNG'S CONCEPTION

Figure 20

In both the Freudian and Jungian psychology, the specialized psychic forces are given spatial representation. While they are metaphysical expressions, they present entities crystallized out of the conscious and the unconscious in ways analagous to the differentiation of tissue and organs in bodily development. Out of the psychic forces localized in the mind, Freud differentiates the id, the ego, and the super-ego. The state of restlessness characteristic of every living organ takes the form of tension in the mind. The tension is a consequence of the attempts at adjustment. The impetus to adjustment is furnished by impulses, a sort of blind striving in ever changing directions in search of a situation that will bring about release from the tension. All these forward-moving, goal-striving, organ-satisfying impulses are comprehended under the term id. The id is wholly a product of the unconscious. The conscious is only aware of it as desires or wishes. These are blocked, moulded, and redirected through the operation of the Reality Principle, while the id is energized by the self-regarding striving of the Pleasure Principle. As a result of this conflict there issues the ego as an offshoot of the id. The ego becomes the self-determining factor in personality growth. It is a sort of amalgam whose components are the impulses at work in the unconscious and the reactions to them by the conscious in contact with Reality. But Reality, in its turn, holds within it a duality of forces, the physical and cultural environment in its direct impact upon the individual and the same environment mediated by parents, teachers and fellow humans. The latter are the chief builders of the super-ego. Since both ego and the super-ego have for their purpose the building of a personality adjusted to a world of reality and since reality is eternally opposed to instinctive aspirations, both exert a repressing effect upon the id. The well-adjusted individual is one who can hold all three forces in perfect equilibrium. The id must not be repressed to the point of endangering the biologic functions. The ego and the super-ego must so socialize the id impulses as to permit of group living on terms of equality with one's fellow men and in harmony with the ideals of the group.

The Persona and the Anima: This ego formation resembles somewhat the Jungian topography of the mind. Both the conscious and unconscious work conjointly to form the ego. The innate and acquired urges are localized in the Persona and in the Anima. The Anima is the submerged portion drawing its energy from the Unconcious, its Individual and Collective strata. The Individual Conscious performs the same function as Freud's Unconscious. From the Collective Unconscious it obtains no more than vague impulses and blind strivings of a stimulating nature. It supplies the ego with definite mind sets, a sort of attraction or repulsion for certain ideas; a selective principle that makes for differentness and facilitates or retards the assimilation of environmental stimuli. It also gathers from it the materials for dreams and values which serve as compasses for the individual's endeavors. The Persona is the ego with its super-ego attachment. It also is the product of conscious effort to harmonize the inner individual oriented towards the self and the outer man directed towards society. Since the Persona is the self of the conscious, it is that portion of the ego which faces the world of things and peoples. It is the "I" that the world knows, the person. It is the "I" in a more intimate sense. It is the wished for "I," the person-I-want-to-be, the individual fashioned out of the qualities selected from the psychic wealth at the disposal of the conscious. It is continually being re-fashioned by the exigencies of living, by the forces concentrated in the Freudian ego as well as those comprising the super-ego.

The Anima embraces the energies activating the id plus the undeveloped and neglected tendencies and potentialities. It constitutes in a way a secondary personality known only to the Unconscious. Both personalities are in conflict. The progressive solution of this conflict is the preoccupation of the individual. Upon its proper solution rests his happiness. Many mechanisms and dynamisms are at the service of the mind in the attempt to bring this conflict under control. Victory is never absolute. It is acceptable when the Persona has succeeded in humbling the Anima into a state of tolerable subordination — one that does no violence to the instincts. Failing in this solution, the Persona may become "inflated" to the extent of flowing over into the Collective Unconscious and identifying the ego with the abstract ideas of the mythical persons found there. Preoccupation with ideas that are at several removes from reality makes of a man a pedant, while losing oneself in the world peopled by gods and giants may convert him into a saint or a devil. The Anima too may dissolve its boundaries and become inflated. Such inflation may lead the individual into mystical flights. Both contingencies may involve a therapeutic activity. They are escapist mechanisms in situations in which life is intolerable. Needless to say that the escape may prove more of a banishment than a retreat, a flight into insanity rather than into illusion.

The Jungians Discover Individual Differences: While Freud regards innate differences in the structure of the body and general constitution (instinctive endowment) as psychological data, he does not accord them the importance assigned to the environmentally conditioned development of the sexual libido. "Sex" expanded somewhat mystically into "love" and particularized into many-sided manifestations of the Oedipus complex, is the individualizing factor in personality development. A man is what the Oedipus episode has made of him. This is roughly the Freudian factor in the process of differentiation which grades individuals on a crude scale of adjustment ranging from the admittedly normal to the recognizably psychopathic.

Jung sees the human mind distinguished by an innate tendency so marked for every individual that it serves as a basis for classification as a "type." The degree and persistence of this disposition is modifiable by education and experience but to no larger extent than obtains in the expansion and elaboration of other instinctive drives. But whether wholly in-born or partly acquired, this disposition manifests itself as an orientation towards the self or towards the outerworld. "Introversion" describes the former and "Extraversion," the latter.

The Introverted Type: Introversion makes introverts; extraversion, extraverts. Both are preoccupied with reality but only as it filters through their imagination, and the notion of what constitutes individual happiness. The imagination magnifies or reduces the significance of experiences and their effects; the shape that happiness assumes for every individual depends on the quality and dimensions of one's *persona.* Now, for the introvert, reality is a self-generated world in which the world of things and people are so transformed and controlled as to play a subordinate rôle. Very often the rôle assigned to them is that of intruding and importuning natural phenomena like rain and snow, thunder and lightning, and hunger. The introvert reckons with them but strives to minimize or neutralize their activity and influence. The serious concern of the introvert, the real business of living, is carried on in an inner sanctum in which structures of thought are built. These thoughts revolve about the individual's ideals and aspirations, his relations to the outer world, the need for replenishing buoyancy and resistance to the clamorous outer world, and the preoccupation with "values" designed to keep life joyous and abundant.

The speculative turn of mind leads to seclusiveness. It also leads to reflections upon the relationship obtaining between endeavor and results, ideals and practice, promise and fulfillment, living and its destination, the pursuit of happiness and the mirage of its actualization. When in the grip of these grim thoughts, there is danger of giving way to despondency, and in the event of a serious mischance, the mind may even be pushed across the boundaries of reality into the realm of phantasy towards the frontiers of neuroticism. When repression and neurasthenia accentuate the tendency it may lead to solitariness and the disruption of normal living.

The Extraverted Type: The extravert shuns self-centered thinking. His thoughts reach out to a world humming with activity and teeming with life. In fact, he is likely to find thinking painful because his "realities" are concrete, tangible and possessed of the attribute of "avoirdupois." Abstractions leave him cold not so much by their profundity as by their inanimateness and indefiniteness. He finds animation and definiteness in social relations, in multiplying friendly contacts, in practicing the liveliness he seeks in others, and in regarding his inner mind activity as instrumental for furthering extraverted living. Living for the extravert is a round of personal contacts entered into spontaneously, eagerly, and expectantly. These contacts are free from the formality and constraint that characterize the social relations of introverts. On the contrary they are marked by friendliness, naturalness, expressiveness and warmth. Underlying these attitudes is an emotional current which sweeps the extrovert into main currents of sociability and serves to bring all participants into closer relationship. However, the emotional tide runs so swiftly that it does not permit for deep feelings. He meets so many people that the extravert's feelings are dissipated and frittered away. Yet a sufficient reserve is available to continue this superficial intimacy at an accelerated pace until the emotions become shredded and human contacts lose their potency for stimulating sociability. When this stage is reached, or when exhilirating human contacts are denied him, the extravert is apt to react with hysteria and dissociation.

Degrees of unsociability or sociability are the external marks of introversion and extraversion. The internal signs are even more individualizing. The mind of the introvert is more sensitive, more "tender," and infinitely more cohesive in its texture. Thoughts which originate in the mind, or come to rest there after a period of external stimulation, manifest a great affinity for each other. They tend to form nuclei, systems, complexes which are continually attracted and repelled in an atmosphere of seething activity. Their ceaseless interaction serves to keep them in a nascent state, thus precluding the establishment of stable mind structures, or "water-tight compartments." The extravert boasts of a great many such "compartments" into which discordant thoughts are consigned just as society confines the unruly members in jail. For him the rebellious complex presents no terrors; he exercises constant vigilance to repel the depredations of the psychic marauder, the complex. On the other hand, the introvert is forced to employ an army of psychic G-Men to apprehend the "public enemies" that bedevil the world of the conscious.

The introvert's continual preoccupation with mental conflicts and the extravert's summary treatment of them by incarceration in "break-proof" compartments, manifest themselves in the degrees of resistance the mind offers to dissociation. The extravert can dissociate one part of himself from the other, so that the business of living is carried on with cheerfulness and equanimity in spite of disrupting influences; the main part of the personality is in command of the situation. In the introvert, compartmentalizing is very difficult to achieve; any serious mental conflict produces a cleavage in the mind resulting in a state of dissociation, a house divided against itself. As a consequence, the introvert is involved in two conflicts raging simultaneously on two battle fronts, an inner one in the struggle between warring impulses and an outer one, the theatre of forcible socialization.

THE RECOGNITION OF THE TWO MAIN PSYCHOLOGICAL TYPES

The classification into types does not imply a clean cut, mutually exclusive, division of humanity that embraces all individuals. The introvert and the extravert are at the extremes of a scale of personality. Between them are sub-types of infinite gradation, compacted of the characteristics of both and requiring a complicated hyphenated system for their designation. However, while very few individuals display characteristics of introversion or extraversion in their purely classic form, the attributes of the introvert and extravert are so definitive that their manifestation by any individual colors his personality as vividly as does the possession of a physical trait, such as the pigmentation of the skin. Indeed its conspicuousness may be owing to a physical basis. For, according to McDougall, the property of introversion or extraversion "is a function of some chemical product or products of metabolism; that is, each subject's position in the intro-extravert scale is mainly determined by some chemical influence of the nature of a hormone or endocrine secretion, or some complex chemical resultant of the general metabolism."

These considerations preclude the classification of individuals into pure types. Yet individuals, according to Jung, display typical reactions that fall within the introversion-extraversion sphere of human behavior. Therefore individuals so endowed may be distinguished one from another as tending towards one of these two poles of orientation. Various measurements of introversion and extraversion have been suggested. They differ as regards their dependence upon introspectionist or objective technique. An example of the former is the discovery of one's own degree of self-reference. If upon reading a book of listening to a lecturer, one's concern is "how does this apply to me?" introversion is indicated. If, on the contrary, the question that one asks is "how does it effect Mr. A or Mr. B?" then the diagnosis is extraversion. This approach may be made by an examiner — but its validity depends upon the candor of the examinee.

The personal equation is partly eliminated from the objective test suggested by McDougall. He makes use of a cube drawn in perspective. It is called "The Deceptive Cube" because it changes in appearance according to possible perspective; now one square, now the other approaches or retreats and the slopes change direction now to the right, now to the left. The speed of alternation differs with the introvert and the extravert. The introvert, whose inhibitory mechanism is feeble, oscillates sharply between the two interpretations; while the extravert succeeds in keeping the two measurably apart for much longer intervals. These reactions are in keeping with the introvert's and extravert's mode of response to conflicting life situations. Indecisiveness, vacillation and mental turmoil characterize the introvert's reactions; the extravert can isolate emotional conflicts and by exerting his inhibitory powers to the full, is enabled to face the graver situations of life with composure.

There is, also, an observational test which possesses subjective and objective qualities. It does not depend upon observation of behavior; it attempts to discover the individual's dominant values as these relate to inner and outer reality. If one catalogues an individual's interests and activity one may discover an introvert engaged in pursuits like salesmanship requiring traits of sociability and an extravert preoccupied with scientific data that prescribe immolation in a laboratory. Yet the illustrative salesman might be constitutionally an introvert, constantly pulling centripetally towards an inner core of reflection, while the scientist is holding himself in an enforced isolation most galling to his everexpanding sociality. What demarcates, then, one type from another, is the choice of reality, the inner or the outer.

PERSONALITY DEVELOPMENT FROM THE STANDPOINT OF JUNG'S PSYCHOLOGY

Jung's psychology of personality development invokes many of the mechanisms of dynamics which Freud postulates. The libido or biologic energies drive the individual forward towards self-realization. For Freud's sex urge as well as Jung's general urge of life is confronted by a counter-tide of socialization. The process of socialization, in Freud's view, involves a highly complex series of mechanisms designed to mitigate the frustration and to enhance the satisfactions accruing to the adjustive processes. Of these, Jung recognizes such reaction-formations as repression, sublimation and compensation. But in addition, the Jungian developmental concept includes four fundamental functions of the mind. These are perception, feeling, thinking and intuition. These functions are reminiscent of the "faculties" basic to Classical Psychology. It is predicated that they are both instinctive and psychologic entities of great stability.

Thus reality is viewed in four dimensions: the perceptual, the affective, the relational, and the intuitive. Perception provides the individual with a knowledge of "the shape of things." Thus structure of reality evidences relational aspects, which the mind embodies in judgments, abstractions, comparisons and laws. Feelings supply the mind with "values," the worthwhileness of the products of perceiving and thinking. All these powers are incapable of penetrating deeply into the heart of reality; they do not reveal the subtle and the implicit meanings that inhere in the crudest relationships. The lack is supplied by the intuitive function, the capacity for divining similarities and differences, for viewing things microscopically and telescopically: seeing more than is present to the senses and inferring therefrom consequences that are beyond the evidence cast up by sensory exploration or the reflections of reasoning. These four functions do not operate independently. Nor do they exist to an equal extent in all individuals. They are requisitioned in the service of the basic orientations of introversion and extraversion. For example, the introverted individual may be predominantly a savorer of the sensations or emotions of an inner reality, an adept in the use of the crucible of reason wherein reality is smelted down to be cast into philosophic moulds; or a discoverer of the hidden qualities and possibilities undisclosed to a less sensitive mind. We thus have qualified introverts: the perceptive introvert, the inverted feeling type, the introverted thinker and the intuitive introvert. On the other hand, the extraverted individual deepens the extraversive tendencies by reënforcing them with perception, feeling, thinking and intuition. He is either an avid sampler of experience, shrinking from no adventure that will add to its store; a sensitive instrument for registering the feelings of others for the purpose of adjustment or imitation in the interests of ingratiation; a systematizer of facts and their configurations; or the possessor of a darting mind that makes lightning deductions and sees the coming events before their shadows attain visibility. Here, again, the dominant type is modified by secondary traits into the perceptive extravert, the extraverted feeling type, the extraverted thinker and the extraverted intuitive.

The Evolution of Types and Sub-Types: Since all types and sub-types are constitutionally conditioned, development, in that event, would seem to be a matter of natural evolution. This would be a legitimate conclusion if the environment was favorable and static. But even in the most favorable environment the presence of so many diverse types would by their very diversity bring about conflicts. That this condition does exist is attested by type variations within the smallest family group. Both parents may belong to opposite types and the child, to an antagonistic variant of either. Again, civilization brings about ever increasing complexities often of an unpredictable nature. Therefore, the impact of these environmental forces upon the growing personality is often traumatic in intensity. The shock is best cushioned by a spirit of understanding and forbearance; understanding on the part of parents and teachers that each individual regards reality in a different light, and forbearance in bearing patiently with him while he in turn discovers the unchangeable essence in the individuality of his fellows. For Jung, then, personality development rests on the principle of introspection, knowing oneself well enough to recognize one's limitations so that, in the human relations imposed by social living, one may learn to streamline those traits that offer great resistance to the currents of sociality. Harsh discipline at home and in school may intensify introversion in an individual already given to solitariness, while extreme indulgence may strengthen the nascent forces of extraversion. An extraverted teacher may so fail to understand his introverted pupil as to mistake shyness for unfriendliness and day dreaming for phantasying. Jung would prescribe for the conflict arising from such a situation the treatment he indicates for the very young nervous child. "If a physician has to deal with a nervous disorder in a child of this age, he will achieve the desired end only when he begins to treat the parents." *

THE JUNGIAN VARIANT OF PSYCHOANALYSIS

Freud looks to the past for the cause of adult conflict. Upon discovery, it turns out to be a sexually conditioned nucleus of libidinal energy which became entrenched in childhood in the unconscious as a complex and from which retreat it emerges to make secret incursions into the conscious. Such clandestine forays tend to disrupt the business of living and to drain the mind of energies diverted to the suppression of the psychic marauders. Jung questions the abiding quality in infantile experience, arguing that repressed impulses do not, like fourteen-year locusts, remain dormant and only become activated after a long period of latency, but remain in a nascent state ready to form an alliance with a new complex. It matters little whether the new complex is dissimilar from the old; they join forces and move to the attack. Furthermore, the new complex may project its retrospectivity into the stage of childhood and imbue the latter with an intent and meaning totally wanting in the original experience. For example, the feeling of inferiority that bedevils childhood may be the outgrowth of jealousy of the father's superior size and strength. Yet later preoccupation with sex may invest it with a sexually tinged resentment of erotic significance. The inferiority complex has merged with the Oedipus complex.

Therefore Jung's technique of psychoanalysis concerns itself with the past only to the extent of discovering the individual's philosophy of life. The procedure is known as Psychologic Analysis. It employs as aids, (1) the interpretation of dreams as expressions partly of the Collective Un-

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* Jung, J. G: *Contributions to Analytical Psychology*, p. 319.

conscious and partly of the preoccupation of the moment, (2) free association, (3) controlled association in which the stimulus word is a presumptive indicator of a complex, and (4) interpretation of the material cast up in the interview. The interpretation is an appraisal of the dynamic factors which play a part in fashioning the individual's outlook upon life as evidenced by the means employed in solving the specific behavior problems. Jung cites the case of a schizophrenic in proof of his contention that maladjusted behavior often differs from adjusted behavior merely (1) in its *naïveté,* (2) in its deviousness of approach and (3) in its greater sensitivity to emotional impacts. This patient had become enamored of a man but had convinced herself that her love was not requited. She brooded and became ill-tempered. Once she decked herself out in a bizarre costume. On another occasion she blossomed out in dignified pince-nez, wearing them for purely decorative effect. The thought that the man's interest might be wooed by improving her appearance made her have all her teeth drawn and replaced with artificial ones. The night after the operation she grew hysterical, proclaiming herself a sinner for extracting her teeth, and, her condition becoming worse, she was sent to an asylum.

Jung probed the case to its antecedents and discovered that a former affair had left her with an illegitimate child. This was her secret. She intended to keep it yet feared ultimate exposure. She wished to marry her new acquaintance yet was deterred by a haunting and harassing past. In this light, her subsequent behavior takes on a human meaning:

(1) She tried to draw the man closer to her by a display of finery hoping that the strength of love she was attempting to awaken in him would withstand the shock of the disclosure.

(2) She reviled herself for extracting her teeth thereby

effecting an attenuation of her deep disquiet over the first affair. In this procedure, she resorted to a well-known human frailty: the guilt over a great sin which must remain unacknowledged is expiated, in part, by a harrowing self-denunciation of a small sin. Thus the episode of the extracted teeth became a symbol of sinfulness. Jung emphasizes the common denominator of all thinking by explaining "when we penetrate into the human secrets of our patients, we recognize mental disease to be an unusual reaction to emotional problems which are in no wise foreign to ourselves, and the delusion discloses the psychological system upon which it is based." *

The therapeutic phase of the Jungian analysis finds no counterpart in Freudian analysis. Jung argues that analyzing away the disturbing symptoms is merely "a casual-reductive process." It discloses the peccant complex. Exposing the complex is very much like cutting off a gangrened limb. The real work begins after the wound heals. Then the task of teaching the patient how to compensate for the lost limb, how to alter one's attitude towards the new circumstance, is of paramount importance. In psychologic analysis this is known as the stage of reëducation, the altering of attitudes so that the individual's philosophy of life becomes a courageous and unfaltering attack upon the realities that one can neither avoid nor eliminate.

2. THE ADLERIAN SCHOOL

Developmental Phases of Individuality: The dictum, society is the "individual writ large," may be construed as fitting individuals singly or in the aggregate. The concept "individuality" implicit in it, is reënforced by the qualifying

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* Jung, J. G: *Analytical Psychology*, ch. 13.

"writ large." Both "individuality" and "expansiveness" stem from the same psychic root, the desire of every individual to occupy a conspicuous place in society. By the same token he wants society to be worthy of his individuality so that he may gain and shed lustre in an aggrandizing mutuality. Hence the desire to be "writ large" is shared by individual and by society.

Now, that individuality which is rated so highly is the ego of Freudian psychology. It is also the Adlerian ego. It closely resembles Freud's conception of it as a reservoir of libidinal energy partitioned off by the censor into two chambers, the conscious and the unconscious. The libidinal contents of both contain psychic layers of different density ranging from the lowest layer in the unconscious, heavily laden with the hulks of desires and aspirations wrecked on the rocks of repression, through a layer, intermediate between the unconscious and conscious, in which may be found fragments that have broken away from the complex-weighted debris that clogs the lowest level, to the uppermost layer of the reflective conscious.

The libidinal energy flows through many instinctual channels and energizes many mechanisms or dynamisms. Their facile or obstructed operation produces in the individual the effects of satisfyingness or unsatisfyingness. The obstructive elements are the impediments and hazards reality places athwart the path of the individual's goal. That goal is the feeling of security, adequacy and superiority in a closed circle of social relations. In this circle the individual feels secure because the human environment offers full sustainment to his aspirations and full protection against life's hazards. The individual judges of the degree of the resulting security by gauging the strength of the feelings of "belongingness" and of "desirableness," that manifestations of goodwill inspire in one. The feeling of security is further nurtured by the feeling of adequacy. Every individual longs for this emotionally satisfying security but he is not always convinced that he possesses the ability to attain it to a degree that would gratify his exalted sense of self-importance. The incertitude that plagues every individual results in a feeling of inferiority, either factual or imaginary, real or fictive, in the face of the demands of society — demands imposed upon the individual as the price of social approbation. These demands are envisaged as tasks of varying degrees of difficulty. Some are difficult by any standard of reality. Others are judged to be difficult in the light of the individual's bodily or personality deficits, such as physical weakness or mental insufficiency. One cannot expect a person with a cardiac condition to perform tasks involving considerable physical exertion; nor can one be reproached for the lack of that special mental ability that functions in the mastery of higher mathematics. Since every task is viewed against the background of one's capacity, it is easy to see how self-depreciation or exaggeration may magnify a task to forbidding dimensions. When the forebodings of inadequacy becomes crystallized into a settled attitude, they tend to undermine the foundations of superiority to the building of which the individual's abilities and energies are dedicated. This feeling of superiority constitutes the essence of Adlerian individuality. It is an all-inclusive and absolute superiority into which rationality and irrationality enter as conflicting elements; reason tempers the aspirations of the irrational self in its phases of godlike phantasying; while the irrational self feeds the springs of self-esteem and self-glorification. Deep within the recesses of the individual's mind is enshrined a likeness of himself half-god and half-mortal, richly dowered with omniscience and omnipotence; and above all endowed with a quality of uniqueness unapproached in any other individual. It is this creation that every individual wants to preserve in an untarnished state; it is before this shrine that he burns the incense of achievement. The preservation and exaltation of this ideal self is the preoccupation of the individual's "style of life"; the goal of superiority is his "life goal."

Unfortunately, this ideal of personal superiority is not always possible of attainment. The ideal may be unattainable, either because the ideal cherished by the individual is erroneous from a social point of view, or for the reason that the individual feels himself incapable of attaining it from a sense of a real or fancied inadequacy. The particular style of life favored by the individual furnishes the key to the conflicts which the individual is undergoing.

PERSONALITY DEVELOPMENT

In the normal individual the "life goal" is a feeling of superiority that is based on the possession of solid qualities which spontaneously call forth the approbation of society. He wants to develop these qualities to the highest degree compatible with his abilities and aptitudes and with the limitations prescribed by social necessity. In other words, the individual must learn to weigh himself not only on the scale of his own esteem but also on that of the judgment of others. This is a step in the direction of socialization. It marks an advance from egocentricity to objectivity. But he must proceed further. He must learn to interpret the result. If it discloses conditions of inferiority they should be freely acknowledged along with other inevitables which nature inflicts with thoughtless prodigality.

Having acknowledged one's limitations as inescapable and tangible realities, the individual is ready to modify his life goal to meet the exigencies of personal limitations and to make use of the unimpaired and normally developed abilities and capacities so as to bring them to the highest pitch of development. Thus conceived, life should provide opportunities for every individual to reach the highest development of which he is capable without suffering the pangs of frustration, the humiliation of inadequacy, or the distress of insecurity. There is a niche of varying degrees of prominence in the world's Hall of Fame for every one who cares to adapt himself to its dimensions; and one can distill from life a full measure of significance and worthwhileness, if one learns to invest it with a significance and worthwhileness that is readily attainable and socially acceptable. Indeed, one need not be deprived of the sense of superiority in which the fantastic, the meretricious, the egotistic, and the ostentatious have been overshadowed by the realistic, meritorious, the coöperative and the restrained.

Developmentally, the individual does not pass through the three pre-adult stages which Freud postulates. The oral, anal and genital stages are merely way stations in the individual's progress towards his destination, the goal of self-significance. The human environment of childhood, the family constellation, is viewed as the vehicle for the attainment of the superiority, an unchallenged superiority of a king asserting his sovereignty over his subjects. The oral, anal and genital modes of behavior are more expressions of the individual's style of life than reaction to parental reality. The child conforms to the discipline of personal cleanliness because he wants to be liked by his parents and he craves their affection for the feeling of security it conveys — a feeling that serves to sustain the secret longing for superiority. Sexual curiosity and sexual interest become involved in a highly disturbing Oedipus situation only in so far as their gratification enhances one's ego ideal and not as an inescapable experience which affords the occasion for the transference of the libido from the self to other love-objects.

Adlerians do not regard the Oedipus episode as the critical stage of development although it often constitutes an individual's style of life. When sex becomes the dominant interest it ceases to be a natural road to superiority; it takes on the indirectness and circuitousness of a path in an elaborate maze.

While the Adlerians have relieved the individual of the Oedipus incubus, they have revealed a no less fearsome menace. It is commonly known as the *inferiority complex,* but the technical designation is a "feeling of inferiority." This feeling arises out of the conflict between the individual's striving for personal supremacy and the world's insistence upon the recognition of a communal ideal. Here you have the struggle between the Pleasure Principle and the Reality Principle transformed into a conflict between the ideal of personal superiority and social reality. The reality principle of Freud has undergone little change; it includes physical, human and cultural elements. The pleasure principle, however, has more of the conscious and less of the unconscious in it. The conscious component is the directive force behind the individual's self-affirmation in terms of a "life line." The unconscious ingredient is the restless longing to actualize the secretly cherished ideal of oneself as a fabulous, miracle-working superman.

But, it may be asked, how can so exalted a conception of self succumb to a feeling of inferiority? It arises from the realization that two types of obstacles interpose themselves between the ego ideal and its realization, a real organic or mental deficiency, and the exactions of environmentally conditioned realities. The normal reaction to natural deficiencies is to redistribute life's tasks so that they fall heaviest on the more competent and vigorous mechanisms. When a person loses a hand, he develops the other to such a pitch of dexterity that he may hardly feel hampered by the loss. In striving to overcome the handicap of a mental deficit, like a disability to master mathematical principles, he may learn to excel in studies in which the mathematical faculty is not a factor. The feeling of inferiority may be charged to environmental factors such as:

(1) A feeling of helplessness that grips the child when faced with insuperable tasks, or a feeling of littleness and weakness engendered by repressive and dominating adults:

(2) A feeling of uselessness and insignificance caused by a succession of failures suffered in the attempt to solve life's innumerable problems.

Now, just as organic inferiority is overcome by developing and devising substitutive mechanisms, functional and personal inferiority is nullified by recourse to similarly structured dynamisms. The process of eking out or neutralizing a deficiency is known as *compensation.* In the Adlerian psychology, "compensation" is conceived as a dynamism possessing adjustive as well as protective potentialities. When it is called into requisition to overcome an organic or functional defect it serves to further the individual's adjustive efforts; when it is invoked in an effort to assuage the pangs of inferiority, it operates to conserve the integrity of the ego ideal.

So precious is the individual's self-esteem that he never wearies of hedging it about with protective devices. Indeed, he often carries protection to absurd lengths. Such is the case when a sense of inadequacy, be it real or imagined, in the face of a difficulty deepens into a tormenting inferiority so distressful as to cause the individual to resort to overcompensation. Like vice, overcompensation is a virtue carried to extremes. For example, the little man, made acutely conscious of his diminutive size, may resort to devices that display his inches to best advantage; he may enlist the cunning and artifice of his tailor, shoemaker and hatter; he may perfect his posture so as to give the appearance of height. In addition, he may decide to supplement posture with conspicuousness, by dressing in "loud" patterns, by smoking long cigars, or by affecting a pompous bearing. Or he may model himself upon the "little corporal," often succeeding in secretly persuading himself that he is a reincarnation of Napoleon. Now, artificial aids to one's height, an erect posture perfected into a "military bearing," are forms of compensation justifiable in a civilization that exalts masculinity. When compensation takes the form of what has been facetiously characterized as a "Napoleonic Complex," the enlarged self-portrait may fall far short of a delusional representation, yet it is a harmful phantasy; harmful insofar as the inadequacy has been unduly magnified. Also the type of compensation invoked has violated the "realities" of the situation. The "realities" in playing a Napoleonic rôle are:

(1) The lack of the Napoleonic genius which bears no relation to stature.

(2) The implications of uniqueness and the assumption of superiority, attitudes that provoke resentment and alienate good will, thus aggravating the feeling of inferiority.

THE NEUROTIC PERSONALITY

The warp and woof of the "life-pattern" are superiority and reality. Its texture may be fine or coarse, smooth or knotty, depending upon the care the individual takes in its fabrication. The defects arise from choosing the wrong pattern or from clumsy workmanship. Like all complex products, the "life pattern" demands careful planning. The individual must become adept (1) in overcoming difficulties, (2) in compensating for inadequacy and (3) in fashioning a socially useful ideal of superiority. No one is exempt from such apprenticeship. Its duration and benefits depend upon the abilities and aptitudes of the individual. Some learn quickly and display special aptitudes. They learn to take difficulties in their stride, avoiding the pitfalls of oversensitiveness and overcallousness. They harbor no illusions about their abilities yet do not belittle their endowments. Above all, they acquire the insight into the true inwardness of a satisfying worthwhileness acceptable to the individual as well as to society. It leads to a conception of superiority in which purely personal triumphs are subordinated to social recognition, and in which avidity for prestige is tempered by a determination to earn it as a reward for socially approved achievements.

However, this is not a portrait of the average individual. Often it is marred by blemishes and flaws. The ideal of self-worth has been misconceived and therefore the style of life has not proven conducive to effective adjustment. Adler traces the tortuous life line of a problem child. She was doing well in her studies but her parents complained that she made too much ado about preparing herself for school. The task of fixing her hair, instead of falling into the smooth grove of routine, became the object of querulous solicitude demanding the harassed ministration of the entire household. Adler diagnosed the case as a "school girl's exaggeration of her own importance." The hairdressing episode is a means to an end, the end being the recognition on the part of her family of her importance as evidenced by her ability to overcome such insuperable obstacles that beset the path of education. The desire to enhance one's self-importance is a normal ambition. But the means of attaining the aim is neurotic. By exaggerating the difficulties that attend schooling, she is advertising the fact that she entertains grave doubts as to her ability to succeed. She feels that she must succeed to please her self-esteem. Yet she doubts her ability to do so. Hence she involves her environment, magnifies her difficulties with a view to proving an alibi for possible failure. It is as if she announced to the world that going to school is so complicated and onerous a task that failure is almost inevitable. This school girl's neurosis is an indication of a feeling of inferiority masquerading under a show of superiority. The former undermines the individual's feeling of importance; the latter serves to prop it up. The indulgence in a spurious superiority is the way of the neurotic.

The feeling of inferiority, then, is at the root of the neurosis. The neurotic advertises the presence and progress of the self-depreciatory trend and the form it assumes reveals the means the individual is employing to insure "the safety of the feeling of personality, and the life-line with which he has identified himself." Since the feeling of inferiority is quickened by environmental difficulties epitomized in parental and community demands, it follows that an unfavorable human environment has the effect of augmenting the child's inferiority. Unless overcome by judicious training, childhood merges into adolescence and adolescence passes over into adulthood without equipping the individual with the countervailing psychological attitudes of sensible self-appreciation. The disharmony between self-depreciation and self-exaltation may crystallize into a locked conflict of serious proportions. There may ensue disturbing behavior difficulties of purely eccentric significance, behavior disorders shot through with neurotic manifestations that point to a cleavage between the individual and his human environment, and aberrancies that testify to the presence of a deep, and very often unbridgeable, gulf between the individual and reality. The degree of tenuousness of the contact with reality serves to demarcate the neurotic from the psychotic.

In the classification of neuroses and psychoses the Adlerians follow the Freudian terminology. But the etiology is markedly different. The Oedipus of Freud is replaced by the inferiority of Adler. In the illustrative example cited above, the girl's preoccupation with her hair would, in the Freudian diagnosis, assume a sexual significance of the type designated as "hair-fetishism." The Adlerians rejection of the sexual dynamisms is best illustrated by their conception of the phenomenon of compulsion neurosis. Shorn of elaborations, the compulsion neurosis is an attempt to bolster up a precarious sense of security and self-importance and a "manifestation of the desire to dominate, to exalt oneself, by degrading others." In the phobic variation, the singer who could hardly resist the impulse to jump out of a window, could only restrain it if some one remained at his side. Since this was impossible in a theatre, he was serving notice upon the world that but for this affliction "he could have been the greatest singer in the world." In the ritualistic compulsion, like washing one's hands continually and meticulously, a neurotic is posing as a superior being because he is committed to a strict and exacting regimen of cleanliness and that all others are "dirty swine." Even in cases of compulsion of psychotic gravity the same longing for superiority is discernible. Such is the case in the neurotically beset individual who from early childhood felt inferior to the brilliant members of his family. His life was an endless repetition of futile attempts to impress every one with superiority. In explanation of his failure to achieve signal success he invoked an ingenious "alibi." This "alibi" was the curse of a scrupulous conscience which rose to plague him every time he faced a task whose performance involved ethical considerations which, to a person of his noble spirit, were serious enough to cause him to postpone action, thus enmeshing him in Hamlet-like procrastination. Thus exaggerated ethical pangs paralyzed his will and when, in flight from a difficult situation, he threw himself on the floor of a crowded church in abasement for being "the greatest sinner on earth," he was committed to an insane asylum.

THE NATURE OF ADLERIAN THERAPEUTICS

The unconscious is not given as much prominence as the Freudians accord it. It does afford a refuge for the "overstrained goal," or the "fictive goal" which the individual found difficult or impossible of attainment. Repression operates to block egress therefrom but does not transmute it into a furtively active and unacknowledged complex which disintegrates into harmless elements under the impact of psycho-analysis. True, into the striving for the goal of superiority there enters the unconscious urge to God-like domination over one's environment, but the energies which feed it stem from the conscious. It is the conscious which elaborates, modifies, and directs the individual's style of life. It sets the goal, surveys and appraises the abilities and aptitudes at one's disposal, checks them against the demands of the social and human environment, and plots a course of action designed to subdue the latter to the dominant aim. If the self-survey discloses a personality deficit, the individual consciously sets out to compensate for it; if the environmental difficulties prove serious, the same conscious effort is exerted to overcome it by direct attack, flank attack or by means of detours. At every step of the individual's progress, thinking is brought into requisition. It may not be logical thinking, it is not infrequently inefficient thinking that is more in the nature of "muddling through." But it is informed with cogent reasonableness which inheres in a plan of action that actually works.

This conscious planning, this adaptation of means to an end, may lead to normal adjustment or to grave maladjustment. In case of maladjustment, the fault lies in defective thinking; in thinking in purely personal terms, in planning a purely prestige-striving existence oblivious of the claims of social responsibility, in persuading oneself that the cowardice born of the feeling of inferiority is an ennobling resignation to a cruel fate or a strategic retreat in the face of the on-rushing horde of life's problems. To bring to the erring individual the consciousness of the defects in his "life-style" and to develop his social interests is the task of re-education which the Adlerians regard as the keystone of their therapeutic arch. The treatment of the neurotic involves two major steps: (1) The understanding of his life-style. (2) The cure. For example, the behavior of the obsessive neurotic is analyzed to reveal the operating mechanism. These are: 1. *(a)* A misguided trying for personal superiority blocked by a fear of a potential inferiority. *(b)* A compulsion occurs in case of a difficulty of major proportions and really symbolizes an explosive and truculent "no" to life's demands. *(c)* The compulsion is a disguised attempt to achieve a sense of unchallengeable superiority. *(d)* The compulsion is an attempt to evade life's responsibilities.

(2) The cure consists in carefully explaining to the patient the nature of the symptoms and the motives that actuate them; in revealing to him the tendencies to neuroticism that, beginning in early childhood as defensive measures against a difficult environment, ended in a psychic flight from reality. In the case of the problem child who found preparing for school so distressing, the treatment prescribed is less explanatory and more admonitory. The girl was told that her behavior was a species of "bragging." She wanted everyone to know that one who can maintain himself so efficiently in her studies in the face of mountainous difficulties and harassing details is surely of heroic stature. Adlerians would go even further. They would risk saying

"School is the most important thing in the world, and if I were you I would make even a greater fuss about it," thus implanting the germ of self-criticism that would in time serve as a counter-impulse to the desire to impress people with her importance.

In the therapeutic technique of the Adlerians, there is little of the tunneling and burrowing into the unconscious. It assumes that thinking and willing activate and energize the dynamisms of adjustment. Whether as "trial and error" varieties of infantile orientations, or the analysis and synthesis of higher developmental stages, the individual's life-style is self-made. For good or ill, it is his own handiwork. Therefore, thinking with the individual, putting oneself in his place, will disclose the errors in his "dialectic of life." An appeal to the selfsame thinking, if carefully planned and timed, should prove fruitful. In this regard, the Adlerian technique is not unlike the manipulation of a film at first run at normal speed, then in slow motion, to afford opportunities to dwell upon special features or sequences. The psychiatrist is both operator and commentator; the patient is the audience.

3. THE RANKIAN SCHOOL

The Freudian concept of the human mind is topographically a dualism of unconscious and conscious, and dynamically a goal-seeking, actively striving libido. Each "school" effects a change in both the structure and content of the unconscious and conscious; a change so far-reaching as to be recognizable only after close scrutiny. The unconscious is represented as a subterranean compartment only fitfully lighted up by flashes of consciousness, replete with biological urges and repressed urges. It is a store-house of id forces, the habitat of fears and hopes, of the collective unconscious functioning both as the id and the ethical-social super-ego, and the anima, or the shrine of the individual's God of superiority. The Rankians envision it as the will-head of the generic will, sexuality "in the broadest sense of the word." The conscious of the other "schools" is crystallized in the ego and super-ego, the persona. The Rankians conceive the conscious in terms of will, the individual "will force" contrasted with the generic "will force." The individual "will force" is the will to fashion an autonomous individual capable of steering a middle course between enslavement to environmental and biological forces and an independent existence guided by self-generated ideals. The generic "will force" is the energy flowing through the sex drive.

This striving for autonomy differs not a little from the libidinal purposefulness of the other Freudian schools. The sexual drive is recognized as an important factor but its importance inheres more in its challenge to the individual's exercise of sovereignty over his life and less as an instinct seeking immediate and unacceptable outlets. Jung's "general urge of life" as it ramifies through the consciously deepened hereditary channels of introversion and extraversion, and Adler's urge to self-assertion, are replaced by Rank's striving for the emancipation of the human will.

Against what forces are these struggles for emancipation waged? They are waged against the dominating and dictatorial designs of the outer world, and the insidious machinations of the inner world of sexuality. Before the age of puberty, the clash between wills take place on one front: the conflict between the individual's will and that of his parents. The conflict is no sooner resolved by a compromise or evasion, or accepted as an unpredictably protracted struggle, when another threat looms up at the age of puberty. The sexual drive attains a high state of urgency and manifests itself as an importuning and compelling force more exacting than parental authority. What weights this situation with deep significance is the fact that this conflict presages to the individual a clash between another will, thus forcing him to defend himself simultaneously on two fronts; the overwhelmingly compulsive biologic drive within, and the collective will of his human environment in a shattering impact against his will.

PERSONALITY DEVELOPMENT AS WILL GROWTH

The growth of the will may be traced through various stages of self-assertion and dependence. In the pre-pubertal stage the impact of parental will upon the individual's will is so devastating as to crush the budding spirit of independence. The barrage of parental prohibitions smothers any counter-attack before it is fairly launched. Such repeated set-backs breed a sense of caution and expediency; they manifest themselves as peace overtures which eventuate in a cessation of hostilities. But it is not a lasting peace; it is but a truce, a breathing spell in which to strengthen the will against further assaults.

But the post-pubertal period brings into the field another enemy, more powerful and certainly more ruthless than parental domination. To meet this threat, the individual calls into requisition the weapons employed against him. To inhibit sexuality, he makes use of the prohibitions forced upon him by his parents by incorporating them in a super-ego of censorious powers. He willingly accepts an outside will as an ally against the nefarious designs of another alien will.

This seeming surrender marks a critical stage in the development of the individual will. It is a conscious acceptance of an external will as justifiable intrusion. Such intrusion had always been resented by the will operating as counter-will. As counter-will it feeds the fires of inner conflicts which blazon forth the conviction, "I obey because I must," or "I do not will, but I am willed by an external force." Now for the first time, the conscious will, bowing to the logic of inescapable and protective necessity, acknowledges "must" as a vitalizing force in the forging of one's will and as a concession to reality compatible with self-maintenance.

It is not an easy consummation. But a more difficult adjustment soon presses for consideration. This is the recognition of the justifiably compulsive quality in externally applied limitations upon the exercise of the individual's will; of the reasonable "must" that renders external force acceptable to the self and robs it of arbitrariness. Once the compulsions and restraints of a will external to the individual is envisaged as an expression of "right" rather than of "might," it becomes less difficult for the individual's will to become at least partially identified with that exercised by the collective environment. Such merging of the two wills so that the mandates of one are accepted by the other leads to the "affirmation of will" as distinguished from "denial of will"; the former is formulated into "I must, therefore I will," the latter is epitomized in the conviction "I will because I must." Affirmation eventuates in a workable adjustment between the inner and outer self so that the integrity of the ego has suffered little impairment, and the autonomous self has not been seriously weakened by humiliating concessions. Denial of will signalizes unconditional surrender to an external will. Compliance with its mandates is rationalized as submission to a superior force — a surrender that kindles insurrectionary fires known as conflicts. It rages unabated as long as the outer force is perceived as imposed from without; as long as the individual can claim "I do not act through the dictates of my own will. I obey a force!"

THE ADJUSTED AND MALADJUSTED PERSONALITY

The external force against which the individual contends is the moral code. Driven by necessity for subjugating the resurgent sexual drive, he accepts it as an ally, he uses it as a raw material out of which he constructs what Rank calls "ideal-formations." It is transformed into personal ethics, serving as a sort of moral valuation of psychologic events. These ideals inform the individual's behavior and act as incentives of willed conduct, thereby transmuting compulsion into freedom. No longer does the individual writhe under the harassment of an enforced morality externally applied; he now acts in obedience to ideals of his own choosing. He has made his peace with the world; he has drawn the boundaries between the self and the outer world; above all, he has delimited the respective spheres in which the external will and the individual will may exercise full sovereignty. In demarcating the spheres of each, the individual has solved the problem regarding the degree of inter-action and intimacy that should subsist between the individual and his environment. This is the problem of *partialization* and *totalization;* the former is a relationship which does not permit events to become too deeply implicated with the self; the latter exposes the self fatalistically to the stifling tentacles of environmental forces. Such adjustive progress marks a stage of development spoken of approvingly as the "ability to float in society."

The second stage is more consciously conflicted. It is characterized by a distressful disharmony between the will, counter-will and the compulsions of the outer world. It expresses itself in the dialectic, "I must, I will not and I should not." The self is tortured by a painful vacillation towards the external moral code, the self-created code of the ideal-formation and towards a pattern of behavior that the empirical ego is disposed to accept. The degree of success which attends the control of this wildly oscillating pendulum of orientation is decisive in the individual's upward climb in personality development. He may reach a higher synthesis in which the ideal becomes the dominant directive force, ordering his life in obedience to a personal code which, while transcending the external moral code, does not do violence to it. This is the highest development of the constructive individual touched with originality or even genius. On the other hand, the heightened conflict might rage with increasing fury. The resentments awakened by the insistent imposition of the external moral code may impel the individual to view its injunctions as arbitrary, capricious and irrational and, above all, as discordant with the wished-for and willed aspirations. If this attitude is sharpened by meditation and illuminated by a fine intellect, it may reënforce the counter-will to the extent of inhibiting the will. This is the path traversed by the neurotic.

THE RANKIANS REJECT THE FREUDIAN THERAPY

The psychological dilemma of the self is its precarious stability between the tension of the inner will and the strain of the outer compulsions. The latter are more unsettling owing to (1) their ruthless and unremitting coerciveness and (2) their fearsomeness in their naked reality. Human nature does not take kindly to prohibitions and injunctions, firstly, because as such they constitute a threat to one's self-esteem; secondly, for the reason that contact with reality in the raw is a highly disquieting and repugnant experience. It does violence to the instincts, it piles frustration upon frustration, and it surrounds the individual with a repressive atmosphere that jeopardizes not only his freedom but his security and his very existence. Add to this the inconsistencies, vagaries, and stupidities that blemish the highest forms of civilization, and you have a picture of a reality of fearful and irrational lineaments. This is an untouched picture of reality from which the individual shrinks and against which he summons the insurrectionary forces mobilized in the counter-will. The adverse impression of reality is reënforced by the conviction that this disquieting reality is the true reality and not an imaginary one.

But truth as an intellectual concept is only disturbing in so far as it discloses demonstrable possibilities for harm. Not so with truth stamped with emotion. Such "truth" is transmuted into psychologic truth which is a matter of belief and feeling rather than investigation and reflection. The reflective nature of the concept complicates the problem of adjustment to reality. It may make the unacceptable realities more unacceptable, and the acceptable or indifferent, abhorrent. The individual resorts to one of three possible solutions:

(1) He effects an alteration of attitude with the aid of the mechanism of illusion; he persuades and deceives himself into believing that the reality present to the senses can be clothed in highly attractive imaginative vestments.

(2) The individual may refuse to compromise with reality. He, therefore, is constrained to live a life of violent reaction against the impact of an intolerable reality; forever torn between the desire to accept life in its unvarnished state and the fierce urge to expose its mockery and hollowness. Such tension produces a condition of emotional turmoil. The individual so assailed becomes conflicted, reviling himself for his inability to accept life, and tormenting himself with the unreality of his existence.

(3) The conflict provoked by the real or imagined disparities between truth and life may burn out and give place to ideal-formations which enable the individual to accept

reality as partial truth and partial rationalization, to find truth in an ideal reality approximating truth in its essence if not in appearance.

The resolution of the neurotic conflict hinges upon the individual's attitude to reality. To enucleate the complex in order to expose the cause of the neurotic symptoms is what Freud would do. The causative factor, whether the Oedipus conflict or derivatives therefrom, is then presented to the neurotic as the "reality" behind the conflict. The patient, having discovered the source of his emotional difficulties, effects a reconciliation with life by adapting himself to reality. Rank rejects the psycho-analytic technique as incompatible with the understanding of the true inwardness of the neurotic's difficulty. It is useless, he argues, to attempt to "sell" reality to the neurotic. He is not flying from, or evading reality. He is immersed in reality, only his immersion has led him to affirm the emptiness and futility of reality. His problem is not to discover reality but to accept it. He finds reality, including his own personality, little and worthless compared to the reality of his aspirations. The neurotic does not need to be taught to accept himself as a worthwhile and significant personality in a world whose realities, while not ideally perfect, are inevitable and indispensable. He can do so if he learns to employ all the psychic mechanisms that give to reality the appearance of truth; the mechanisms that enable the individual to "repress, displace, deny, rationalize, dramatize himself and deceive others," with the connivance of the conscious and the assent of the unconscious. By doing so, life becomes realistic, *i. e.,* it strikes a balance between capitulation to reality and escape into psychic isolation.

Now, Freud's psychoanalytic therapy is misconceived both in theory and in practice:

(1) Theoretically, the analysis is intended to hook up

the present to the past by removing the obstructing thing, the Oedipus complex. Such linkage affords the individual an opportunity to accept the past as a necessary stage in the maturation. As a developmental step it can only have historical significance as a mode of behavior that had been outgrown. Its therapeutic importance is that such awareness may operate to prevent regression and a recurrence of infantile fixation. Rank concedes that the destruction of the complex may serve as an aid in accepting the past instead of unconsciously rejecting or "denying" it; that freeing the self from an infantile fixation is a prerequisite to freeing the self from inner and outer domination. But having freed itself from it, the over-strong drive to independence resumes its sway over the self. Indeed it aggravates the conflict by riveting the individual to his past, a past which he had rejected summarily as incompatible with the exercise of an autonomous will. For by interpreting the neurotic symptoms as infantile fixation on the Oedipus level, Freudian analysis is guilty of the "infantilization" of the actual therapeutic situation. What the analysis does, Rank accuses, is to bind him to the past firmly and irrevocably by showing the individual that not only can he not wholly free himself from the past, but that morally it is much better that he does not sever the bonds.

(2) Rank's strictures on the practice of psychoanalysis are equally categorical. The analytic situation should only relate itself psychically to the past. Connecting the individual with his past on a psychic basis involves reliving of the past as a mode of thinking, feeling and willing centering about the most significant psychologic problem, the acceptance of himself as an autonomous individuality fully responsible for his own behavior and emotional attitudes. He achieves such responsibility by learning to approve instead of criticizing himself. In the Rankian analysis, the thera-

peutic effect is produced by affording the individual an opportunity (1) to collide head-on with the realities of the immediate present and (2) to tear off its mask of fearsomeness because the analytic situation had emboldened him to a degree never experienced before.

THE RANKIAN THERAPY

Jessie Taft, the translator of Rank's works, has spoken of the Rankian technique in terms of "the dynamics of therapy in a controlled relationship." Her chief work has been carried on with behavior-problem children. It differs from the traditional Freudian technique:

(1) in the neglect of the subject's past.

(2) in placing a time limit to the duration of the analytic cycle and,

(3) in limiting the analyst's rôle to that of a catalytic agent.

The child appears for an interview but finds no catechising psychologist. Instead he is ushered into a room simply furnished and amply provided with playthings. The analyst or "therapist" sits at a desk apparently immersed in clerical work. The child is invited to look around and play. The analyst answers questions put to her but does so briefly and with no show of enthusiasm. She takes the initiative only when the play situation appears dangerous to the child or so boisterous as to involve a breach of the amenities as far as they relate to the interference with the comforts and rights of another. As the interviews succeed one another, the analyst distills from every situation its psychologic essence. If the child shows recklessness in handling sharp-edged toys, it is reminded quite impersonally that the consequences are no responsibility of the therapist; that the discipline of consequences is an inexorable force to be trifled with at one's own risk; that the time element is another inescapable reality which imposes additional limitations upon one's freedom. The cumulative effect of these objective experiences and impersonal relationships is to present to the child an unsentimental picture of life as the orientation of the self in a world of realities capable of inflicting pain, frustration and loss. These afflictions must be borne patiently and serenely along with such natural visitations as wind and storm and heat. It does not counsel resignation; it merely counsels acceptance as a datum of life which, while distasteful and even distressing, may be neutralized, if not nullified, by the mechanisms that wear mantles of illusion in which to enwrap experience. This consummation delimits true elements of vital significance. It elevates the relationship of therapy into a "process in which the individual finally learns to ultilize the allotted hour from beginning to end without undue fear, resistance, resentment or greediness. When he can take it and also leave it without denying its value, without trying to escape it completely or keep it for ever because of this very value, in so far has he learned to live, to accept this fragment of time in and for itself. If he can live this hour he has in his grasp the secret of all hours, he has conquered time for the moment and in principle." *

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* Taft, Jessie, *The Dynamics of Therapy*, page 17.

CHAPTER IX

APPRAISAL OF THE CONTRIBUTION OF THE VARIOUS SCHOOLS OF PSYCHOLOGY

1. EXCEPTIONABLE FEATURES AND THEIR INHERENT CONGRUENCY

The fruits of scholarship and research have been utilized to add to the sum of knowledge by expanding some horizons and by contracting others. These additive and subtractive trends have made themselves felt in psychology in keener insights into human nature and in separatist and sectarian movements. Human nature being what it is, new insights have provoked violent dissent in obedience to the impulse of intrenching settled ideas behind sandbags of conservatism ever on guard against the onslaughts of new ideas. These ideas are stigmatized as radicalism. Against this common enemy, the conservatives wage ceaseless warfare. Their militancy is often accompanied by a quality of truculence, as if to emphasize the primitiveness that lurks even in scientific thinking. Indeed, it would seem that the essential humanity of civilized man is refractory to discipline and that the scientific attitude of rigorous objectivity and dispassionate scrutiny is honored chiefly in the breach. The boasted scrupulous impersonality of the scientific mind is so tempered by subjectivity as to dissolve under the impact of strong opposition. It may, therefore, help bring about a keener evaluation of the criticism levelled at the various schools if such criticism is viewed from the angle of subjectivity and that of scientific validity.

Foremost among the manifestations of subjectivity is the bias displayed by many critics in favor of the conception of man as a being fashioned in the image of the critic. He endows him with a will strong enough to quell the unruly instincts, an intelligence that enables him to hew to normality, a dignity that rises above meanness and trivialities, and an aesthetic sense that rejects unerringly the unlovely, the graceless, and the vulgar. He is, therefore, violently opposed to a mechanistic psychology that reduces his mind to unruly instincts raging in a chaotic unconscious, is saddened by the spectacle conjured up by Behaviorists who would degrade consciousness to a passive responding machine, is disgusted with the Freudians' revelation of the cloven-footed nature of many desires and wishes, and is horrified and infuriated by Freudian "pan-sexualism." He dismisses these psychologists as notoriety seeking "debunkers" and as odious "muckrakers" who should be ostracized from polite society; *i. e.*, his type of polite society.

No less insidious is the attitude of critics who snipe at any one who advocates views opposed to their own. They are "agin" everything that threatens to upset their ideas. Their resentment is explicable on several grounds: their limited intelligence is unequal to meet the challenge of any new idea that threatens to undermine the prestige their theories had already won them; and jealousy of the emerging innovator whose rise in popularity may signalize the setting of their own sun. The favorite weapon of these die-hards is sarcasm and satire thinly disguised in logical vestment, and often tinctured with concentrated venom. These critics are easily matched by the passionate seceders from the parent school. They, too, fail to depersonalize their views. Into the acerbities that are generated by the heat of controversy, the charge of disloyalty is projected. There is thus created a highly explosive mixture that often demolishes the barriers of self-restraint. When self-control is shattered, merit is overladen with irrelevancies and logic is adulterated with sophistries. The differences that brought about the schism are lost sight of in an orgy of mutual recrimination. The tragedy of it all is, that while the disputants fritter away their energy in internecine warfare, their following melts away. They are shunned for their inflammable sectarianism and for demonstrating, in their own behavior, the powerlessness of their brand of "psychology" to build a disciplined personality.

Another class of critics deserve mention. Here belong the apostles of common sense. Their credo is embodied in the injunction "look for simple causes and simple explanations of all phenomena." Their emblem is William of Occam's razor. It is a product of scholasticism and its passion for perpetuating well-tried principles by fitting the new facts and ideas into the mold of old generalizations. Applying this principle to psychological findings these "simplists" reject explanations of psychological phenomena that are not fully in accord with experience and practical common sense. They are found, therefore, among the critics of the intricacies of Freudian reasoning, of the complex superstructure which Watson has built upon what they consider the tenuous foundation of Pavlov's experiments, and of the bizarre gyrations of the complexes under the lash of repression. Their objections are not based on scientific grounds; they do not use the touchstones of validity, logicality, or verifiability. All they demand of an explanation is, "Is it transparent enough to be followed? Is it in harmony with established facts? Is it simple enough to fit into the old without a remainder?"

Mention must be made of "conscientious objectors" who, unlike the upholders of the dignity of man, are actuated less by vanity and self-glorification than by moral scruples. To this class belong a motley assortment of critics: the puritanically inhibited individual who views psychological candor as a challenge to his repressed appetites; the alarmist who sees the world engulfed in a tidal wave of licentiousness; the devotee of orderliness who views all advocates of psychological freedom as destroyers of civilization; the defenders of religion who see in Behaviorism the denial of all spiritual values and in Freudianism an invitation to return to paganism; the upholders of the *status quo* who view with alarm the rise of a generation capable of glimpsing the potentialities of psychology as a builder of an enlightened civilization that can curb human passions without destroying the zest for living; and, finally, the scientifically minded who would reject all psychology that cannot meet the rigorous requirements of scientific procedure.

The personal equation, also, is interwoven into the texture of a large body of unclassifiable critics. Indeed, it seems to operate as a limiting mechanism in all attitudes that involve, no matter how remotely, human relations of competitive import or the sustainment of the sentiment of self-esteem. One will be well advised, then, to make full allowance for bias both in the critic and in the reader. Having discounted partisanship, the consideration of criticisms of various schools of psychology should possess the merit of objectivity if not of scientific precision. To impart continuity and coherence to these considerations, it seemed advisable to arrange them as regards their alleged fundamental shortcomings rather than the accident of "school." Thus conceived, criticism may be summarized as follows:

1. **The tendency towards a mechanistic interpretation of the mind:** Drawing upon mechanistic analogies, the mind is conceived as a complex machine like, say, a printing press or an adding machine. It can perform many complicated maneuvers in a series of successive operations or in concerted

coördination of manifold processes. The type is inserted, the roll of paper is adjusted, a switch is thrown and the machine whirls into life, pouring into the journalistic stream a flood of papers as mechanically perfect as the manipulative skill of many workers could make it. By analogy, the human machine, the mind, is also envisaged as an intricate arrangement of neurones organized into operating units closely integrated into a system. The motive power is supplied by instinctual drives. It not only operates the machine but it also casts the type and composes the "story" dictated to the instincts by the voice of heredity. The environmental forces play the rôle of paper whose function it is to record the message. A modified conception is advanced by some who would add other contrivances in the form of higher brain centers whose duty it is to edit the "story" written by the instincts to conform to definite standards of propriety set up by environmental powers. But even this guiding attachment is merely a "regulator." It regulates the order in which each sub-unit works and times their operations so that collisions are averted. This power of self-regulation is possessed by many automatic machines; a measure of purposiveness may be built out of steel and wood. It continues its purposive way as long as there is no structural difficulty and as long as no new demands — demands not anticipated by the engineer — are made upon it.

This mechanistic picture could be fitted without difficulty into any psychological frame provided it is designed for a very simple environment. In an environment complicated by taboos and breath-taking changes, something more than a skillfully articulated machine is necessary to serve the individual as an adjustive tool. Instinctual gratification runs afoul of environmental constraints so that mechanical purposiveness is soon proven inadequate to the task. The imperativeness of finer and variable adjustments calls for a purposiveness that can exercise resourcefulness, initiative and ingenuity. Perhaps scientists may succeed in fabricating such qualities out of inert matter; perhaps there is packed in every nerve cell a greater capacity for creative thinking than psychologists dream. But there is no more warranty for assuming that the nervous system and environmental forces react the way they do without the intervention of a thinking, weighing, and planning mechanism than there is for assuming that nature can heal all diseases without the administrations of physicians. Now, superior thinking ability is resident in that indeterminate, unfathomable area called the "mind." It is not merely another mechanism, for its activity can, by no stretch of imagination, be conceived as mechanistic.

It would seem then that many mechanists are the victims of an analogy. The behavior of all animals, including man, displays mechanistic trends. All nature is mechanistic if by mechanistic it is meant to convey the presence of such qualities as precision, consecutiveness, and continuity.

2. **The tendency to intemperate assertions:** One can match every milestone of progress with a corresponding marker of exaggerated claims which imperil every progressive step. Exaggeration is deeply rooted in the impulse to magnify the importance of one's accomplishment in order to aggrandize one's individuality and, in the limitations of the mind, this precludes the individual from regarding phenomena from the long perspective of correlated data. Perception is primarily isolative; it is meditation that supplies the prospective and retrospective content for a background against which the newly discovered is envisaged as an element in a configuration. Furthermore, the elation and pride in discovery affects one's judgment, especially when such discovery fits in with the needs of society. The perfection of a serum against infantile paralysis would naturally attract

greater interest if accomplished in the midst of an epidemic or on the eve of one. This favorable conjuncture of events exercises a magnifying effect not only by its timeliness but by its beneficence.

It is not surprising, then, to be confronted with claims that place a severe strain on one's credulity and one's sense of proportion. It is very difficult to contemplate with equanimity Watson's rejection of conscience, Freud's enthronement of the Oedipus experience as the chief causative factor in neuroticism, Jung's attribution of directive influence to the collective unconscious, Adler's elevation of the inferiority complex to satanic malignity, Rank's elaborate staging of the duel between will and counter-will, and Koffka's importations of physical concepts into the realm of psychology. All these arouse antagonism not so much because they are not susceptible of direct proof or scientific verification, but for the reason that authors have, for the most part, been oblivious of the thoroughly human sensibilities which disrelish smugness and superciliousness in the claims of others. The charge of infallibility and arrogance can be proven without difficulty. Indeed, this failing is so general that unless one deliberately discounts it in advance, it may vitiate judgment to an alarming extent.

However, when one succeeds in divesting oneself of prejudicial attitudes, the tendency to exaggeration appears less ominous. For one thing, it is difficult to discover conclusive supporting evidence for the contention that human behavior may be generalized into "laws" applicable even to that ill-defined aggregation of humans composed of "average" persons. While psychologies differ in their relative stressing of endowment and environment, nature and nurture, all concede the importance of their interaction. This concession involves them in an impasse owing to the uncontrollable and incalculable elements that derive from such interaction. As a consequence, the discovery of the ultimate causative factor in behavior is not so readily ascertainable that presumptive proof may not be legitimately adduced for any startling assertion. For another, the attribution of universality and primacy may be difficult to substantiate owing to (1) obtuseness of the critic's insight, (2) the presence of the barrier of intellectual fastidiousness, and (3) unwillingness to seek proof. It is not at all improbable that many well-meaning critics are incapable of Freud's penetrative insight, Adler's intuitive judgment, Jung's mystical vision, Rank's pervasive logic, Watson's audacious experimentation, and McDougall's catholicity. Not only are these critics incapable of seeing but they are victims of psychic blindness. They deny the causal significance of sex because they are painfully allergic to it, or they contemplate it from the autumn of life when its urgency has abated. Few give heed to Freud's invitation to submit to a "free" analysis, for such analysis invariably casts up the mouldering remains of the Oedipus. Others are averse to Freud's "pan-sexualism" from an overly sophisticated refinement of behavior and a too moralistic orientation to sex.

3. The confusion created by the use of metaphorical language: The metaphor has great expository potentialities. It sustains to the obscure the same relationship that obtains between a concentrated statement and a paraphrase. It does something more. It transmutes the abstract into the concrete, the dimly felt into the definitely sensed. But it should be used with great caution lest the analogy it portrays be not mistakn for mutual identity and its schematic character be not accepted as reality. These cautionary observations have a decided relevancy for psychology because so much of its content can only be imaginatively apprehended, and not a little is sheer fancy.

That such confusion does prevail does not necessarily argue a want of perspicuity on the part of the writers. They are fully aware of the transformations metaphorical language produces in the physical aspect of things and in the impression of dimensional extension with which it invests the intangibles. The occasional lapse one discovers is but the author's way of making impressions vivid and precise. But the student may not know all this. He is apt to be carried away in proportion to this very vividness and clarity. Particularly alluring are the metaphorical structures conjured up by the Freudians; veritable architectural masterpieces supplemented by cleverly executed ground-plans and beguiling descriptions of compelling seductiveness. The solid masonry of the unconscious with its thrilling underground passages; the attractive façade of the conscious; the great variety of apartments with their distinctive decorative effects to suit the temperamental occupants, the ego, the super-ego or the persona; the motley assortment of below-stairs creatures who carry on back-stairs conspiracies and indulge in strange rites — all this is a prolific source of confusion and misconceptions. It ensnares the literal-minded and confuses the more imaginative. Yet it is unavoidable because, despite the concrete nature of the findings of psychological investigation, psychology is still in the metaphorical stage of development.

4. **The disparity between promise and performance:** Each school of psychology pretends to a complete and adequate understanding of human nature, yet the influence upon behavior is almost negligible. The sum of human happiness remains pitifully small, the "conquest of human passions" is to a large extent a rhetorical phrase, "human engineering" is wishful thinking, maladjustments continue to bedevil the individual and society, and insanity is on the increase. The disparity between promise and performance may be attributable to (1) the futility of all attempts to

reduce life to a science when its protean nature demands the subtle adjustability that only art can bestow; (2) the oversimplification of the conflicts arising from the interplay of the individual and his environment; (3) the inadequacy of man's instinctive repertory of responses in coping with the complexities of modern civilization; (4) the deepening of the cleavages produced in the mind by the multitudinous ideas, systems and codes vying for recognition; and (5) the impediments the individual unconsciously creates when he attempts to live by an undiscriminating acceptance of psychological principles designed for popular consumption. It seems that the situation resolves itself into a paradox; the greater the so-called self-knowledge gleaned from current psychological miscellanies served up by popularizers, the less the promise of adjustability; that "knowing" oneself is not enough, for psychology is just one of many disciplines that exercise an ameliorative influence upon civilization.

5. The fortuitous factor in personality development: The popularity of "Awake and Live" and "Be Glad You Are Neurotic" represents two contrasting views of human nature. One is the "go-getter" philosophy that locates success in the human will. It does not admit that the word "failure" corresponds to a psychological entity; if one but try hard one can accumulate enough faith to move mountains. The other viewpoint is characterized by a fatalistic or overfutilitarian outlook upon free will, yet its proponents are sufficiently enamoured of life to wrest some happiness out of the sorry business of living.

There would seem to be ample justification for so pessimistic an outlook. All psychologies concede that the process of becoming adjusted to one's environment is only exceeded by the struggle to achieve inner harmony; that perfect adjustment is rarely attained; and the fortuities of existence weigh down personality development with so many incalculable factors that to speak of normal development is to indulge in statistical speculation. The Neurological schools are bedeviled by the fear of structural deficiencies and breakdowns in reflexes and in neural mechanisms. The Behaviorists are perturbed by the constant menace of the disruptive casual stimulus with its adverse conditioning possibilities. The Hormic psychologists are fearful that in the hierarchizing of sentiments the personality might fall into the clutches of an unworthy master sentiment. The Gestaltists condemn the individual to a harrassed existence in a "field" of forces that rock him with strains and tensions. The Freudians offer the individual even less roseate prospects. Their insistence that the major patterns of life are laid down during the first five years of life reduces the chances for normal development almost to the vanishing point. For these are the years during which the mind, too tender to resist environmental encroachment, easily falls a prey to the vagaries, caprices and singularities of its human environment. When the hardening process sets in, the mind is beset by two dangers, the insatiable demanding environment and the insidious and vagarious complexes within. Under such handicaps, the struggle for adjustment turns out to be a life-long battle between the purposive mind and vagrant impulses; between the forces of rationality striving for unity and harmony and the forces of disruption that would dissolve life into an aimless and random existence.

That chance plays a part in the fashioning of lives is attested by the prevalence of superstitions, the sober attribution of mysticism to omens and "hunches" and the widespread belief in a beneficent or malevolent fate. There may be no such influences, but there is no denying that chance must be reckoned with as a factor in personality development. Life cannot be freed of fortuities; neither human foresight nor social planning can ever guarantee the individual exemption from the perils of "life's banana peels."

6. The vulgarization of the spiritual: The aesthetic and romantic seem to go together. A beautiful object is beautiful as much by virtue of its inherent characteristics as by the romantic halo with which it is invested. This halo exercises a purifying and refining effect so that no taint of commonplaceness, or sordidness, or earthliness, is permitted to pollute the essence of the beautiful. The muck that gives life to a rose goes through a subtle process of sterilization and becomes prophylactically acceptable as "humus." Aesthetics also frowns upon atomistic dissection that would reduce the rose to its biologic and chemical elements of cells and chlorophyll. Such a process would be considered so unromantic as to verge on indecency. Yet the rose is beautiful regardless of, or despite of, its association and affinities with muck and chemical substances.

The moral traits that spiritualize individuals have also been approached with romantic reverence. They have been referred to as the expression of man's "higher nature" and have been safeguarded from contamination by man's "lower nature." It pleased these worshippers to ascribe to these traits a divine origin unconscious of the implied antithesis between the divine and the earthy. They found the Freudian thesis that moral behavior is the result of character-formations a shade less revolting than the companion thesis that misbehavior is ascribable to the mismanagement of the sex drive. Yet an analysis of man's motives seem to disclose the vividly red threads of instinctual gratification in the conduct of both saints and sinners. The difference between saint and sinner is not that the former has repressed his instincts. It lies rather in his capacity to canalize them to useful ends. But no matter how successful the process of sublimation has been, no conduct, however sublime, is free from the influences of instinctive urges. Indeed, the high eminence ethical thinking has reached in spite of the strong centrifugal pull of pagan forces, points to the vitality of the spiritual forces that enable man to subjugate the carnal self. Why begrudge man the fruits of so hard-won a victory by rewarding him with approbation, self-assertion, self appreciation and the feeling of worthwhileness? If exposing the worldly roots of ethical conduct is vulgarization, then the writing of medical books should be placed under Comstockian censorship. The validity of the whole Freudian thesis apart, the imputation of vulgarity cannot be substantiated, unless the revelation of the unlovely character of human perversions can be so stigmatized.

7. Trend towards an exclusively functional explanation of mental disorders: Doctors are averse to pleading ignorance. When a case presents baffling aspects a way out of the dilemma is quickly found. Once it was "tonsils" and then "teeth." Now it is the "mental state" that is cast in the rôle of the villain. If the patient is not improving, he is dismissed with, "there is nothing organically the matter with you. It is just a case of nerves." Here, again, the Freudian influence is predominant. Yet the evidence gathered in post-mortem examinations of felons, the corrobrative data advanced by Dr. Cotton, seems to point to a hidden physical cause for much of what might easily pass for purely functional disorders. Whether the emotional conflicts induce physical derangement, or whether somatic disturbances follow prolonged mental tension as a secondary effect, is still a moot question. But there is little doubt that the complex is made the scapegoat of every ill that does not readily yield to medical treatment.

Recent medical discoveries would seem to add weight to the contention that there exist reciprocal relations between the physical and mental that are far-reaching. The success obtained in the treatment of some "praecoxes" with insulin would seem to weaken the Freudian foundations. If a drug can resolve a delusion then the texture of delusions is composed of something more material than errant thoughts. In this connection, there comes to mind the case of the American composer, Gershwin, who was under intermittent care of psychiatrists for nervous indigestion, and died of a brain tumor. However, this statement may give point to one of constant hazards of logical thinking; the fallacy *ergo hoc propter hoc*. Coincidence has ruined many a promising theory.

8. **The paucity of experimental and experiential foundation for data serving as supports for vast generalizations:** An experiment can earn the qualification "valid" if it follows a most rigid procedure. It must be conducted under controlable laboratory conditions; the experiment must canvass all possible variables that enter into the situation as components; of these variables only one may be tested at a time while the others are kept constant, anl the findings must be subjected to stringent verification under realistic conditions. These prescriptions insure validity but they do not confer universality upon the resulting law. Nature operates under adaptable, though stable, patterns that insensibly become modified under the impact of new forces. It has even been said that the alternation of day and night falls within the realm of probability and not that of certitude.

Psychology has accepted the canons of scientific experimentation but has failed to make allowance for the infinitely greater influence of probability in the interplay of calculable and incalculable elements. Human behavior is the resultant of an unresolvable complex of causal factors combined in infinitely varied degress and intensities. There are the instinctual and libidinal drives of varying urgency, undergoing alterations under the impact of countless environmental stimuli. So unpredictable is their activity that even such a simple habit as brushing one's teeth is never undeviatingly constant. Emotional upsets, bodily discomforts, the pressure of other duties, the condition of the brush — all these but typify the range of influences that modify behavior. Variability of such factors affects the behavior of all individuals. Therefore the abstraction of characteristic reactions and their integration into patterns yields but statistical concepts that correspond to types of behavior or to an "average" individual. As a consequence of the distortion of the scientific method, there has arisen a body of rules and principles which, like ready-made clothes, are made to behavioral "sizes" or "average" persons. Paradoxically, they rarely fit even these without alteration, while the run of the mine personality is poorly served.

The entire body of tests of emotional balance are summations of individual reactions. If one hundred persons are invited to answer the question, "Are you ill at ease in the presence of a group of strangers?" the preponderance of say, "nays" is elevated to the dignity of a normal response. The fact that the subjects were ""normal" people does not add a scintilla of validity to the findings. First, because there is no dependable criterion for "normality." Secondly, very few people are exempt from a feeling of unease in the presence of strangers, especially if the latter are of some importance. If this manifests itself in a heightened curiosity, a feeling of tension may arise. Thirdly, those who are not affected may be lacking in social feelings or in emotional depth. Fourthly, the mere fact that sixty per cent or even ninety per cent said "no" does not create presumptive evidence of the presence of neurotic symptoms in the individual who answers "yes." For it (1) has yet to be established that unease in the presence of strangers is of itself a neurotic manifestation, and (2) that the behavior pattern of even large groups can set a standard of behavior for the entire population. Equally flagrant departures from scientific procedure may be charged to psychologists active in the field of abnormality. There is strong probability that Freud's preoccupation with sexual neurotics may have colored his conception of the normal personality. Here the fault lies in generalizing from a limited number of cases. This failing is shared by other psychologists. A particularly intriguing "case" in which the symptoms are sharply delineated is wrought into a type. All too frequently, the findings are accepted by complaisant practitioners in order to substantiate thereby their claims to progressivism or to establish their professional keenness. Since the dimensions of perceptions often fluctuate with interest, deep scrutiny of these symptoms has the effect of bringing into greater clarity and significance mental phenomena that heretofore have aroused but vague concern. As a consequence of such enlargement, mere resemblance is distorted into identity and the incidence of the ailments mounts by leaps and bounds. The manufacturers of cosmetics who "discovered" upwards of a score of new skin afflictions are but following in the footsteps of psychologists who, eagerly abetted by inventive amateurs, are constantly adding new complexes to the already formidable and terrifying array of abberancies ranging in importance from the all-inclusive Oedipus to the mock-serious "automotive psychosis" that manifests itself in such singular preferences as loud horns, brilliant body colors and quaint gadgets. Thus the magnifying process goes merrily on piling one complexity upon another. Small wonder then that modern man is so hopelessy conflicted, for to the traditional mental strains have been added a host of distresses that place the goal of normality definitely out of his reach.

9. Too ready acceptance of social constraint as a definite psychological datum: All psychologies consider adaptability as cardinal in adjustment; lack of it is a major handicap. This adjustive activity is directed toward the realities comprehended under the term "environment." Man must adjust himself to his environment, both physical and social. The onus of adjustment is placed squarely on his shoulders, though failure is often ascribed to insuperable difficulties that inhere in the environment. Even concededly impossible conditions are merely viewed as a challenge to man's ingenuity. Nature has provided him with endless resources in the form of dynamisms that serve as transformers, shock-absorbers, solvents, and emollients.

Much is said in praise of the well-adjusted individual who has made his peace with reality. The constraints of the social environment are seemingly viewed as affording a proving-ground for one's normality. "Sublimate, repress, suppress, substitute, romanticize, clothe in the vestment of illusion and invoke the Nirvana of escapism, only do not whine about circumstances." This seems to be the burden of much of the "pep" talks that fairly shriek their message of an "up and at them!" philosophy.

Even the Freudians, who have brutally rent the veil of respectability that formerly shrouded the sovereignty of parental authority and the unchallenged censorship of inveterate prudery, have held out little hope for the emancipation of new generations from the tyranny of environmental realities beyond the anxious hope that these generations might profit from their struggles to the extent of bearing down less weightily upon their own offspring. It betrays a touching faith in the ameliorative trends of progressive enlightenment. Unfortunately, this benign influence seems to operate but retrospectively at the most critical stage of the life process, the adjustment to the Oedipus conflict. As an adjustive mechanism, "Perspicacity after the fact" is not the hoped-for frictionless adaptation that functions with a minimum of emotional stresses.

Furthermore, even "creative" adjustment to social constraints is not as thoroughly eliminative of conflicts as the psychologist would have us believe. The individual who has succeeded in rising above the irrationalities and the arbitrariness of the social environment rarely displays a saintliness that transmutes the anti-social drives into impeccable mechanisms of selfless conduct, the philosophic temper that can deny the claims of the flesh without regret or frustration, or the artistic temperament that can find in artistry a protection against the "barbs and arrows of outrageous fortune." Now, if the extraordinary individual finds it difficult to attune himself to reality, the ordinary person's chance for effectual adaptation are dismayingly slim. It may, therefore, not be amiss to re-examine the accepted concept of normality and prune it, not only of its distressing vagueness, but of its incorrigible complacence towards the constraints of the social environment. This might well involve new emphasis on the innate and environmental factors in adjustment. A distinction might be established between the normality of the individual equipped with psychologically sound adjustive mechanisms inter-acting with a social environment of easily surmountable difficulties and one fated to an uneven struggle with an admittedly impossible environment. Also, it might be advisable to differentiate between the psychologically abnormal person with hereditary predispositions to emotional conflicts which ethical instabilities and economic upheavals are apt to accentuate, and the psychologically abnormal individual distintegrating under the blows of an unkind fate. Psychologists might retort that they are scientists and not reformers. This sounds suspiciously like begging the question, for the scientist is duty bound to take into account all influences that bear upon a phenomenon. Besides, they cannot restrict their activities to non-reformist spheres because psychology is thoroughly permeated by ameliorative trends. It would be straining the meaning of "reform" to invalidate it as a label for the unquenchable zeal psychologists display in helping to improve the lot of the psychological man, and since the psychological and social man are inseparable, both sociology and economics become the legitimate concern of psychology.

2. THE CONTINUITY OF PSYCHOLOGY

It is well known that the old saying that "there is nothing new under the sun" has been employed effectively to deprecate the claims of those who arrogate to themselves the rôle of creator. Tin-pan alley boasts original spirits who resent fiercely the imputation of plagiarism with a vehemence that brings upon them the reproach of "protesting too much." These protestations bear witness to the importance that is attached to acts of creation. Originality is prized so highly that those who possess little aptitude for it clothe their mediocrity in conspicuously bizarre raiment. Ingenuity is tricked out in the brilliant feathers of genius and a meretricious quality is imparted to the trivial and synthetic.

The story of psychology is replete with Icarian flights of genius and pedestrian accomplishments of lesser spirits. Solid theorizing alternates with fanciful speculation. Solid scholarship and patient research throng its pages. It recounts amazing progress and astounding retrogression. It chronicles advances that have illuminated the recesses of the mind and were succeeded by others with greater candle power. In this way larger areas of the mind were exposed.

As one thumbs the pages of the story of psychology, one is struck with the recurrence of the characterization "new." It is as though every psychologist were engaged in altering the lineaments of the mind by the psychological equivalent of plastic surgery. With every such operation the mind assumed a radically altered appearance. So radically different are these transformations that the casual beholder is readily persuaded that he is confronted with a new mind. As a consequence of such manipulation, psychology is embarassingly rich in portraits whose kinship is not readily discernible. They are less family portraits than a gallery of unrelated individuals. Furthermore, each artist claims that no relationship may be assumed, for his subject, the mind, bears no similarity to the others. His is a faithful reproduction of the true mind and all other representations are spurious.

Yet the claim to newness is not entirely without merit. It would be an act of ungraciousness to deny credit to those who have made vital contributions to psychology. They were original contributions in the sense that each one has produced an increment of knowledge. It need not be epic or revolutionary. It may even be conceded that the question of validity need not weigh seriously in the scale of prestige. In a field in which speculation may not be excluded, the significance of a contribution may be enhanced by future research. The conception of "soul," central to ancient psychology, is accorded recognition as the "self" of modern psychology. The "soul" of Aristotle has proved its vitality as a psychological concept even though it has fallen into disrepute as a psychological entity. Nevertheless, the concept "self" is deserving of the attribution "newness" despite its evident kinship with "soul."

Used connotatively, the word "new" has a place in the history of psychology. It corresponds to a definite entity and justifies the recognition of "schools" of psychology. But however "new" a psychology may be, its roots reach back to the past. There is enough glory for the founders of schools in the refinements they have wrought in old theories and beliefs to forego the egotism that seeks expression in proprietary demands. The galaxy of original thinkers is impressive. Their reputations suffer little, if at all, for having profited from the labors of others. Such acknowledgement will benefit psychology, for it will save it from the blight of atomization and discontinuity. Nothing is so perplexing to the student of psychology as its presentation in the form of an omnibus of systems or a welter of theories.

This difficulty is obviated immeasurably if psychology is viewed as an evolutionary growth. The fact that progress has been along an undeviating straight line is infinitely less taxing than the prevalent impression that its development has been characterized by leaps and bounds. The boundaries that separate the various schools of psychology are not artificial constructions. They represent vital differences. Yet they possess numerous points of contact by which one can pass from one to other and not feel that one has entered a strange realm.

3. SIMILARITIES AND DIFFERENCES BETWEEN OUTSTANDING SCHOOLS OF PSYCHOLOGY

Throughout this book, it may be noted, emphasis has been placed on the continuity and congruency that obtains among the various schools of psychology. Phrasing it topologically, the boundaries that delineate each school have not been so rigid as to prevent the infiltration of principles fundamental to each. There are no closed systems. Indeed there is justification for the view that all psychologies may be viewed as a coalescence of sub-systems each of which exhibits definite demarcations. There is no out-and-out mechanistic school, for even Watson has brought in consciousness through the back door. The claim to the distinction of "scientific" can be successfully disputed by the

Gestaltists who have given experimentation a new lease of life by diverting the movement into the sphere of will and needs and by purging it of its statistical excesses. The antagonisms between mechanism and teleology are slowly being composed by clarifying their functions and attenuating mechanism to a phase of behavior. The status of membership in a vast system of psychologies is accepted by the Topological psychology as evidenced by their readiness to serve as a laboratory for problems of psychology posed by all schools. It merely arrogates to itself a superiority in methodology by virtue of its schematizations and techniques. Psychoanalysis is slowly permeating all schools, even though its protagonists and antagonists are desperately warring over principles and terminology. Even the new accessions to psychological theory and the emergence of new "schools" merely lends force to the dictum that "the more things differ the more they are alike." Take the concepts, "mechanism," "entelechy" and "vector." The deeper we probe into the workings of mechanisms the less mechanical human behavior appears. For a mechanism that can perform prodigies of adaptation is to all intents and purposes an entelechy. The ascription of dynamic power to a vectorial system does not alter the results of behavior just as the current theories of physics do not affect the practical application of electricity. The virtue of new psychological theories lies in their clarification of the springs of behavior. They beguile us by their brilliance and ingenuity. We applaud their authors unstintingly. But admiration is tempered by the thought of the ephemeral nature of so many hypotheses and their inadequacy for the solution of the problem of inter-personal relations.

Nevertheless, consideration must be given to vital similarities and differences between schools of psychology. However, this discussion will confine itself to the schools whose theories are in a state of active emergence and whose principles have not yet congealed into dogmas. For despite the assertiveness of some of their founders, many schools are undergoing serious modifications at the hands of their disciples. The schools to be thus compared are (1) the Purposivist and the Psychoanalytic and (2) the Gestalt (with its topological orientation) and the Psychoanalytic.

SIMILARITIES AND DIFFERENCES BETWEEN THE FREUDIAN AND PURPOSIVIST PSYCHOLOGIES

A. Points of Agreement:

J. C. Flügel has well remarked that "a marriage of Freud's subtlety and profundity of insight and McDougall's clarity and power of integration, if it could be achieved, would augur well for the further progress of the science of human nature and the social sciences that are, or should be, based upon it." The self-complacency and arrogance of some of Freud's followers and the contentiousness of McDougall have kept the schools they represent far apart although McDougall has on many occasions displayed generous admiration for Freud's scholarship. It should be noted, in passing, that the plotting of the common ground has been made by McDougall. However, their points of agreement are largely implied in the principles underlying both schools of psychology. They meet on common ground when they assert that:

(1) *Human behavior is geared to instincts.* While they differ as to their number and prepotency, Freud's limited repertory of instincts coincides with a larger number of McDougall's catalogue of instinctive urges. Such instincts as aggression, fear and tenderness, basic in Freudian psychology, are, in essence, the counterpart of the ascendancy-submission complex fundamental to McDougall's system.

(2) *Complexes are the root of neurotic behavior.* Here again, they do not see eye to eye. McDougall accepts the functional rôle of complexes but rejects Freud's conception of their genesis. Particularly scornful is he of the Oedipus Complex with over-emphasis of sex and of Freud's assumption of its dominance in the hierachy of complexes.

(3) *Behavior is totalitarian in its orientation.* Both reject the atomistic conception of human behavior and stress the view that the total personality is involved in the socializing process.

(4) *There is almost a complete identity between the "super-ego" and the "sentiment of self regard."* Human behavior is subjected to a directive and organizing force which imbues it with directness and invests it with integrity. Without the self-regarding sentiment behavior would be diffusive; the absence of the super-ego would deprive it of a critical "conscience."

(5) *Human behavior is characterized by purposiveness.* McDougall is critical of Freud's attribution of logicalness to the illogicalities of neurotic behavior, but in the main, he subscribes to the assumption that even neurotic behavior is animated by a specialized logic of abnormal behavior which, when viewed psychologically, is found to possess a core of reasonableness.

B. Points of Disagreement:

The points of disagreement, however, place the two schools of psychology in violent opposition. Here McDougall takes the offensive. He finds the following objectionable:

(1) *Freud's conception of the rôle of sex.* Admitting that the sex-impulse is unmistakably at work in many social activities, he denies that it is so predominantly active as Freud would have us believe. Indeed, it is on the Oedipus complex that McDougall pours his choicest vials of wrath.

(2) *Freud's responsibility for the emergence of the master mind in our civilization.* There is no doubt that popularizers of Freudian psychology have totally misconceived Freud's teaching, but the net result has been that, in the popular mind, all restraints are thought to be harmful and misbehavior in the moral sphere is condoned on the basis of the inescapability of the ravages of complexes. Therefore life is to be lived uninhibitedly because frustrations dog our footseps. This has led to the missuse of the Pleasure and Reality Principles.

(3) *Freud's anthropomorphic concepts,* such as the censor, the ego, the id, and the super-ego, only tend to confuse clear thinking. In McDougall's view they savor of metaphysics and have no place in psychology. Their metaphorical significance is outweighed by their disregard of scientific validity.

To these criticisms the orthodox among Freudians oppose a stony indifference. Among Freudian dissentients, though equally reticent about their own theories, McDougall finds many supporters. Perhaps their acquiescence grows out of McDougall's qualified acceptance of many of their conclusions. Jungian dream analysis finds favor in his eyes. He has also shown himself receptive to the Adlerian formulation of the concepts of ego maximation and the inferiority complex. The former is assimilated to his urge for domination; he accords to the latter a significant rôle in personality development.

SIMILARITIES AND DIFFERENCES BETWEEN THE GESTALT SCHOOL AND THE FREUDIAN SCHOOL

A. Similarities:

The Gestaltists, especially those who espouse the topological orientation and the organismic viewpoint, proclaim a close affinity with Freudian psychology in the following particulars:

(1) *The stressing of the organismic over the mechanistic viewpoint.* Both schools look on the individual as a self-regulating energy system structuralized upon an economic basis, *i. e.,* the behavior of the individual, whether normal or abnormal, is the pattern best calculated to restore the balance unstabilized by external or internal blockages.

(2) *The paramountcy of the intimate inter-relation between the psychological mechanism and the cultural and anthropological field in which behavior takes place.* To understand human behavior, the social milieu must be taken into consideration as a factor in its conditioning.

(3) *The close parallelism between the Freudian topography of the mind and the Gestaltists' conception of personality structure.* The conscious, the unconscious, the id, ego, and super-ego are virtually counterparts of the topological regions with their intercommunications; both are multiple-structured.

(4) *The Organismic concept "differentiation" underlies personality development.* From the undifferentiated child personality, envisaged as the id of the analysts and the primitive wholes of the topologists, springs the endlessly variegated patterns of adulthood. They evolve into complexly organized regions through the impact of libidinal or vectorial energy upon the impending barriers that confront the individual.

(5) *The dependence upon the "hypothetico-deductive" or Constructive Method.* Basing themselves upon such concepts as libido, id, and the unconscious, vectors, and the reality-dimension of the life space, both schools make use of them as spring boards for experimentation; the results of such experimentation enriches, in turn, the theoretical bases of their psychologies. Thus theory is buttressed by verification and verification enriches theory. As a consequence facts and theories become thoroughly integrated.

(6) *Both postulate the uniformity and continuity of psychological nature.* Their generalizations about behavior comprise normal and abnormal behavior: it is conceived as a scale with normality and abnormality occupying the extremes and each shading into the other in an infinitesimal gradation.

B. Differences:

(1) *Gestaltists dispute Freudian claims to scientific exactitude.* It is often their contention that the insistence upon mathematically precise definition of concepts and their susceptibility to experimental verification proceeds in the best traditions of the scientific method. Freudian dependence upon clinical observation, while productive of amazing insights, suffers from the vagaries of personal bias.

(2) *The adherence of Freudians to the assumption of the historical genesis of behavior is opposed by the ahistorical conception of the Gestaltists.* According to the Gestaltists, psychology like all the systematic sciences, does not look to the past history of events to explain their structure. All that is needed to describe psychological processes is the knowledge of the momentary situation as it is articulated into the psychological and environmental fields.

(3) *Gestaltists reject the psycho-biological determinism*

of the Freudians. When the Freudians, for example, explain the inevitability of war as a consequence of the latency of the aggressive instincts, they are attributing a considerable amount of immutability to human nature. Furthermore, such an assumption places serious limits upon the extent to which biological mechanisms may be modified by the manipulation of the environment. The Gestaltists contrast this restricted manipulation with the greater potentialities for modification inherent in the Gestaltist's conception of the rôle of social engineering.

APPENDIX

THE PHILOSOPHICAL AND EDUCATIONAL IMPLICATIONS OF THE SCHOOLS OF PSYCHOLOGY

BEHAVIORISM, with its mechanistic explanations of consciousness, makes for naturalism in education. It finds no place for creative intelligence, and for self-determination in the moral sphere. It rejects the reality of mind or spirit. "Mechanical Causation," complains McDougall, affords us no other alternative than to believe that "Man is the hopeless victim of some remote, fortuitous, and wholly unintelligible concatenation of events, a rigid chain within which he is but an insignificant link." Functionalism is pragmatism, for Dewey, the proponent of both, identifies philosophy with education. Purposivism recognizes the dynamic quality in such words as "incentive," "motive," "intention," "willing," "hoping," and "responsibility." It affirms that mankind possesses nascent regenerative forces; that intelligence and will may raise it above the dust. Its philosophic outlook is therefore idealistic. The contributions of the schools to educational theory and practices are considerable and are best approached in a spirit of grateful appreciation of the many significant features in which they abound. For we can reject what is exceptionable and retain what is beneficent.

The Behaviorists have placed us deeply in their debt:

(1) For emphasizing the close relationship subsisting between bodily states and what other schools of psychology call "consciousness"; between the stimulus and its visceral accompaniment; and for providing a technique

(unconditioning) for eradicating obnoxious habits and attitudes.

(2) For ascribing the cause of distressing emotional attitudes, such as fear of the dark, to conditioning rather than to instinctive tendencies.

(3) For insisting that the foundations for moral behavior must be laid in infancy.

(4) For importing into child study the scientific objectivity of the laboratory.

We must credit Functionalism with:

(1) The formulation of the project method and its coöperative implications.

(2) Fostering distrust of predominantly verbal explanations.

(3) The exaltation of purposeful self-activity.

(4) The elucidation of the psychological mechanism, "purposeful thinking," for the enrichment of experience.

We must turn to the Gestaltists for:

(1) Methods of presenting material in configural wholes calculated to facilitate learning.

(2) Means of converting poor gestalts into adequate gestalts.

(3) Techniques of influencing human behavior by facilitating the interaction between the total personality and the total environmental situation.

(4) Supplying a model for the elaboration of an eclectic theory of personality out of the congruent elements of diverse systems of psychology and of science in general.

To Purposivism we owe:

(1) The glorification of the human will.

(2) The elevation of purposivism (goal-seeking) to the dignity of a "faculty."

(3) The interpretation of living as a meaningful striving.
(4) The devising of a method for making ideals dominant in human conduct.

The Freudians must be credited with:

(1) Making the need of teaching mental hygiene paramount in education.
(2) Impressing upon us the necessity of cushioning the impact between wish and reality by so modifying the environment as to make for painless adjustment.
(3) Pointing out the insidious influences of complexes.
(4) Providing the basis for a technique of alleviating the sufferings of complex-ridden individuals.

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